

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000616900001-6

L 60937-65

ACCESSION NR: AF5014317

For each mass ratio the authors measured the distribution of events with respect to the total ionization produced by the fragments in the chamber. The analyzer energy scale was calibrated against time-offlight kinetic-energy measurements at a mass value corresponding to the most probable fission. A value of 21 MeV was obtained for the difference between the average kinetic in symmetrical fission and in fission in which the heavy fragments are magic (130 -- 132). The experimental results were in good agreement with those of J. Milton and J. Fraser (Phys. Rev. Letters v. 7, 67, 1961; Can. Jour. Phys. 40, 1626, 1962), except in the symmetric-fission region, where the decrease in energy, compared with the value at the peak, amounts to The ratio of the maximum and minimum of the final-fragment yield curve in symmetrical fission proved to be approximately 500:1. The total energy release found from the experimental data is in good agreement with calculations based on the semi empirical Weizsacker formula, except for the regions of strongly asymmetric fission. causes of the discrepancies in the latter case are not clear. art. has: 5 figures

Card 2/3

EWT(m)/EWA(h) L 60937-65 UR/0367/65/001/005/0816/0820 ACCESSION NR: AP5014317 AUTHORS: Apalin, V.; Gritsyuk, Yu.; Kutikov, I.; Lebedev, V.; Mikaelyan, L. TITLE: Kinetic energy of fragments and energy balance in thermal neutron fission of U-235 SOURCE: Yadernaya fizika, v. 1, no. 5, 1965, 816-820 TOPIC TAGS: uranium 235, thermal neutron fission, symmetrical fission, fragmetn energy, fragment mass distribution, magic nucleus ABSTRACT: The distribution of the total kinetic energy of complementary fission fragments was measured as a function of the fragment-mass ratio, using a gas ionization chamber. The total kinetic energy of the fragments from the fission of U235 by thermal neutrons was measured directly with the double-grid ionization chamber used by the authors previously (ZhETF v. 46, 1197, 1964; YaF v. 1, 639, 1965). The pulses from the ionization chamber were fed to a multichannel ratio analyzer in which the range of ratios subtended 30 analyzer channels. Card 1/3

L 58340-65 AT501044B ACCESSION NR: Z = 50 (M = 130--132). At this minimum the fragments emit only approximately 0.3 neutron. The curve also exhibits a maximum which has a different position for the different nuclei and shifts towards larger masses with increasing atomic weight of the fissioning nucleus. The position of the maximum for each of the nuclei is quite close to a mass value which is complementary to the magic fragment. An empirical formula is derived for the energies carried away by the neutrons from the fragments. Some hypotheses concerning the manner in which fission proceeds are advanced. "The authors thank J. Milton for supplying the tables compiled by him (UCRL 9883, 1962) and to B. Geylikman and V. Strutinskiy for interesting discussions." Orig. art. has: 6 figures and 3 formulas. ASSOCIATION: none SUB CODIL ENCL: SUBMITTED: OTHER: 012 NR REF SOV: 006

L 58340-65 EWT(m)/EPF(n)-2/EWA(h) Pu-4
ACCESSION NR: AT5010448

UR/3136/64/000/710/0001/0009

AUTHOR: Avalin, V. F.; Gritsyuk, Yu. N.; Kutikov, I. Ye.; Lebedev, V. I.; Mika- Attendary, L. A.

TITLE: Emission of neutrons from the fission fragments of U-233, U-235, and Pu-239

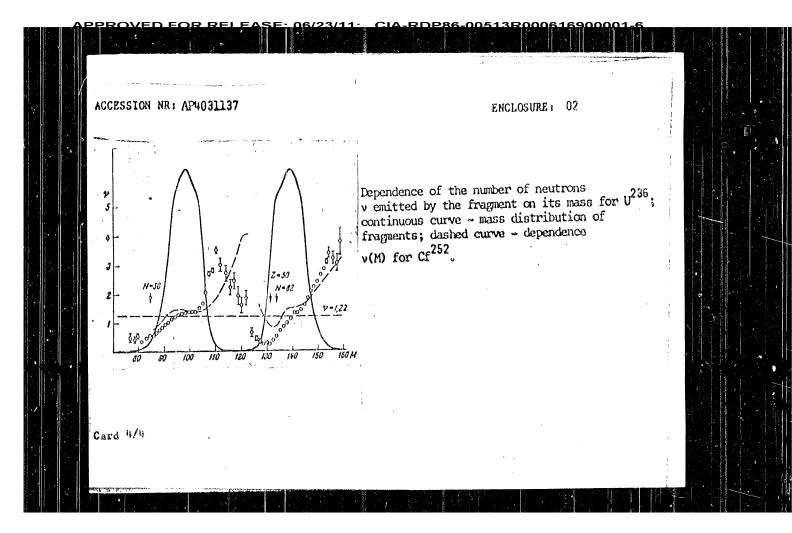
SOURCE: Moscow. Institut atomnoy energii. Doklady, no. 710, 1964. Emissiya neytronov iz oskolkov deleniya U235, U235, i Pu239, 1-9

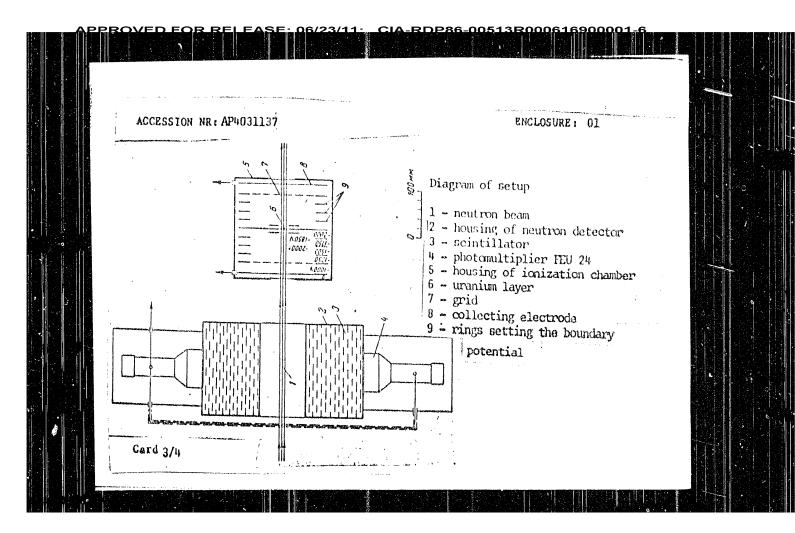
TOPIC TAGS: fission fragment, uranium fission, plutonium fission, neutron emission, neutron energy

ABSTRACT: This is a sequel to earlier measurements of neutron emission from individual fragments in the fission of U²³⁵ (ZhETF v. 46, 1197, 1964; Nucl. Phys. v. 55, 249, 1964). The present paper deals with the results of analogous measurements in the case of the fission of U²³³ and Pu²³⁹. The measurement procedure was described in the earlier paper. Special attention is paid to the reliability with which symmetrical fission events are separated. It is shown that the number of false events registered in the region of symmetrical fission has been reduced to 15-20%. The plot of the number of neutrons against the initial mass of the fragment exhibits a deep minimum whose position is very close to the region of closed shells N = 82,

AT503.0447 mass range. The data reduction and the error analysis are briefly discussed. Plots are presented of the total kinetic energy of the U236 fragments against the initial mass of the heavy fragment, of the spectra of the total kinetic energy of the symmetrical-fission fragment kinetic energy, of the spectra of the total kinetic energy of the fragment for several mass ratios, and of the energy balance in the fission of U236. A value of 21 MeV is obtained for the difference between the average kinetic energies in symmetical fission and in fission in which the heavy fragment is magic (Mn = 130--132). The ratio of the maximum of the curve showing the yield of the final fragments to its minimum in the case of symmetrical fission was approximately 500:1 in these measurements. The total energy release, obtained from the experimental data, is in good agreement with the value calculated by the semiempirical Weizsacker formula in all cases, except in the region of the strongly asymmetrical fission. Orig. art. has: 5 figures and 1 formula. ASSOCIATION: none SUBMITTED: ENCL: SUB CODE: HR REF SOV: OTHER: Card 2/2/

EWT(m)/EWA(h) Peb L 58339-65 UR/3136/64/000/709/0001/0001 ACCESSION NR: AT501.0447 AUTHOR: Apalin, V. P.; Gritsyuk, Yu. N.; Kutikov, I. Ye.; Lebedev, V. I.; Mikaelyan, L. A. TITLE: Kinetic energy of fragments and energy balance in the fission of U-235 by thermal meutrons SOURCE: Moscow. Institut atomnoy energii. Doklady, no. 709, 1964. Kineticheskaya energiya oskolkov i energeticheskiy balans pri delenii U235 teplovymi neytronami, 1-7 TOPIC TAKS: uranium 235, thermal neutron fission, fragment kinetic energy, energy balance, symmetrical fission, asymmetrical fission ABSTRACT: The distribution of the total kinetic energy of the supplementary fragments produced in the fission of U²⁹⁸ by thermal neutrons was determined with the aid of a gas ionization chamber as a function of the ratio of the fragment masses. The ionization chamber was described by the authors elsewhere (ZhETF v. 46, 1197, 1964; Nucl. Phys. v. 55, 249, 1964). The pulses from the ionization chamber were fed to a multichannel ratio analyzer, 30 channels of which covered the investigated Card 1/2





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ACCESSION NR: AP4031137

energy and the decrease in the kinetic energy. The new equipment constituted an ionization chamber and a cadmium-containing neutron detector. Comparison of the data for U²³⁵ with those for Cf²³⁶ refutes the hypothesis advanced by Terrel (Phys. Rev. v. 127, 880, 1962) that the number of neutrons varies with the fragment mass in the same fashion for all nuclei. Calculations show that in the region of symmetrical fission the excitation energy of the fragments increases by about 20 MeV. Orig. art. has: 3 figures and 1 formula.

ASSOCIATION: None

SUBMITTED: 27Sep63

DATE ACQ: 07May64

ENCL: 02

SUB CODE: PH, NS

NO REF SOV: 003

OTHER: 012

Card 2/4

ACCESSION NR: AP4031137

s/0056/64/046/004/1197/1204

AUTHORS: Apalin, V. F.; Gritsyuk, Yu. N.; Kutikov, I. Ye.; Lebedev, V. I.; Mikaelyan, L. A.

TITLE: On the number of neutrons emitted by U-235 fission fragments

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 4, 1964, 1197-1204

TOPIC TAGS: uranium 235, symmetrical fission, asymmetrical fission, neutrons emitted by fragments, fragment kinetic energy, nucleus excitation energy, total energy release, fragment mass ratio

ABSTRACT: Continuing earlier measurements of the total number of neutrons emitted by both fragments in the case of fission of v^{233} , v^{235} , and v^{239} by thermal neutrons (Zhett v. 43, 329 and 2053, 1962), the authors have repeated the experiments on v^{235} with equipment that provided greater resolution in mass analysis, so as to obtain a quantitative agreement between the increase in the excitation

Number of neutrons emitted from ... S/056/62/043/006/015/067
B102/B104

symmetric fission reaches a maximum; max-1 min = 1.60±0.25 for U^234 and A = 1.10±0.2 for Pu^240. For U^256 Av = 1.6±0.2 had been obtained (Zheff, 43, 331, 1962). Owing to effects of the apparatus these values are far from the true ones. Taking those effects into account

Av = 4.0±0.7, 4.4±0.6, and 3.2±0.6 for U^234, U^236 and Pu^240. There is 1 figure.

SUBMITTED: July 16, 1962

Card 2/2

44227

\$/056/62/043/006/015/067 B102/B104

AUTHORS:

Apalin, V. F., Critsyuk, Yu. N., Kutikov, I. Ye.,

Lebedev, V. I. Mikaelyan, L. A.

TITLE:

Number of neutrons emitted from U²³⁴ and Pu²⁴⁰ in symmetric

fission

PERIODICAL: Zhurnal eksperimental'noy i teoretichoskoy fiziki, v. 45,

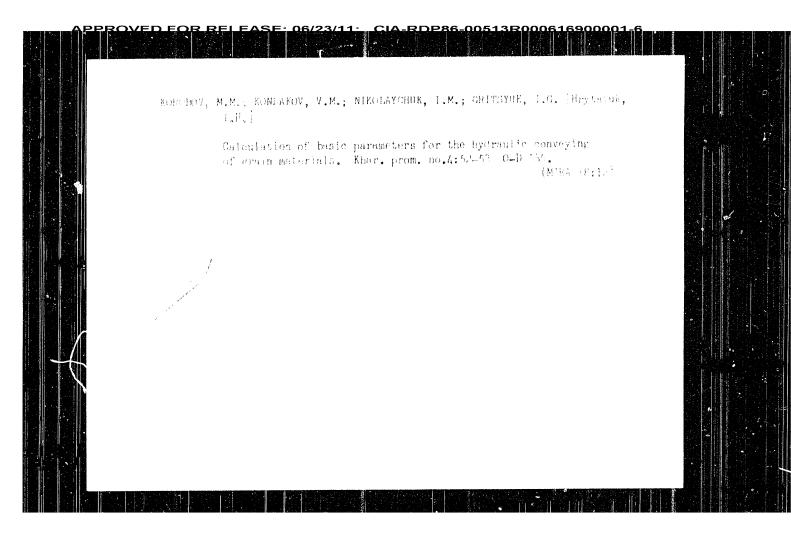
no. 6(12), 1962, 2053-2055

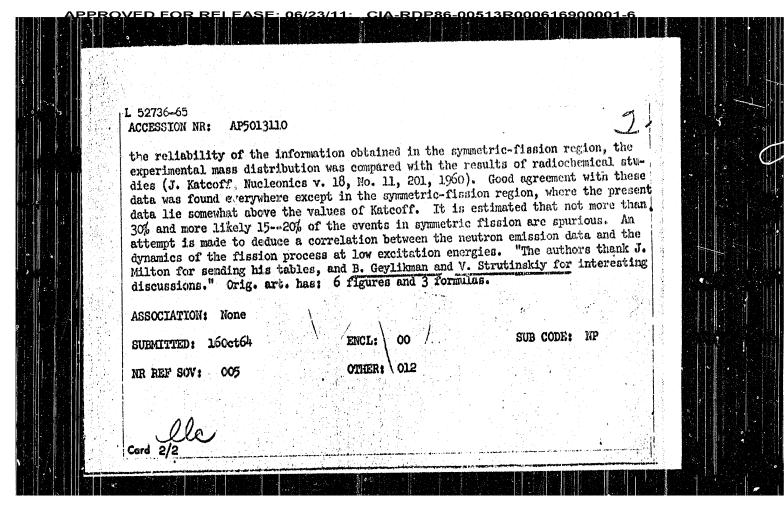
Layers of uranium or plutonium (5-6 $\mu g/cm^2$) were deposited on collodion films (~5 $\mu g/cm^2$), coated with gold (~10 $\mu g/cm^2$) and exposed to a neutron beam from the thermal column of a reactor. The fission neutrons were detected in almost perfect 4π geometry with a double ionization chamber. A mass-ratio analyzer registered all fragments with E 30 Mev; the fragment counting rate was 20-30 pulses/sec. E, the

kinetic fragment energy, was plotted against the fragment mass ratio, and the numbers ν of fission neutrons were plotted in the same diagrams. It can be seen that ν has a minimum where E_c has a maximum. In the case of Card 1/2

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111 3 60 S 3/456/62/043/001/040/056 B102/2104 agarda, V. F., Uritayuk, fg. H., Autikev, I. fe., Lebense, V. in, alledant, in he The expect of Leutrone existing from \mathbb{R}^{d} , \mathbb{R}^{d} , \mathbb{R}^{d} , \mathbb{R}^{d} , \mathbb{R}^{d} , \mathbb{R}^{d} specifical finsion Apply Results higherto optained by studies on the dependence of Applies . Missing on the frequent mass ratio are rather in equivate. In order to . in core reliable data, the authors investigated thermal-mestres lumes. The flerion using a double ionization chamber. In the case of That distribution and symmetrical finsion, the frament yield raths - Daily (true value only). The filmion neutrons were desected in Que a look . The total mumber of flasion neutrons remembed at a gala . ω . If this may need was a_i , a_i . The kinetic energy is of the framewise the such as year of neutrons were gradied in dependence of the mass satis-Jura 1/2 + # Therry & Sir Sign Son





L 52736-65 EWT(m)/EWA(h) Peb ACCESSION ER: AP5013110

UR/0367/65/001/004/0639/06

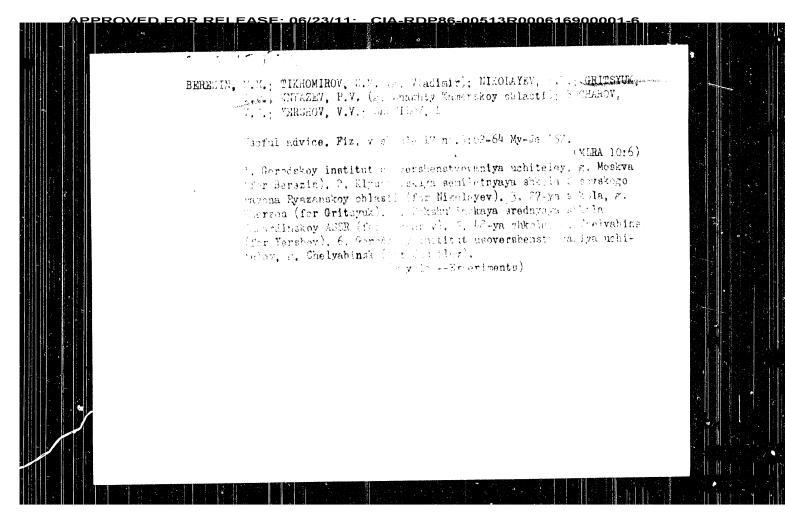
AUTHOR: Apalin, V.; Gritsyuk, Yu.; Kitikov, I.; Lebedev, V.; Mikaelvan, I.

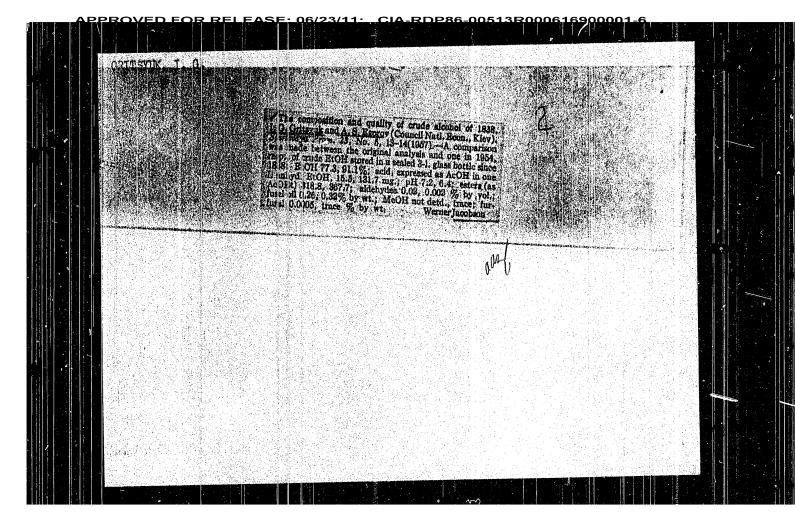
TITIE: Neutron emission from fragments of U233, U235, and Pu239 in thermal-neutron fission

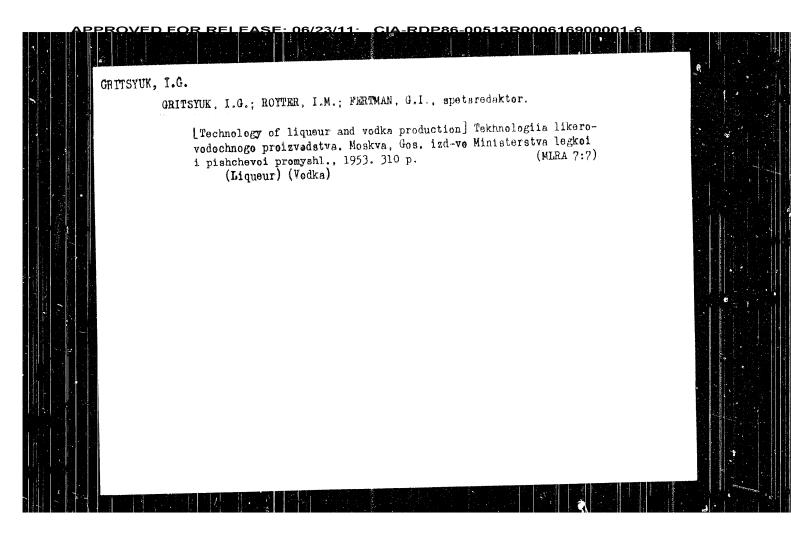
SOURCE: Yadernaya fizika, v. 1, no. 4, 1965, 639-646

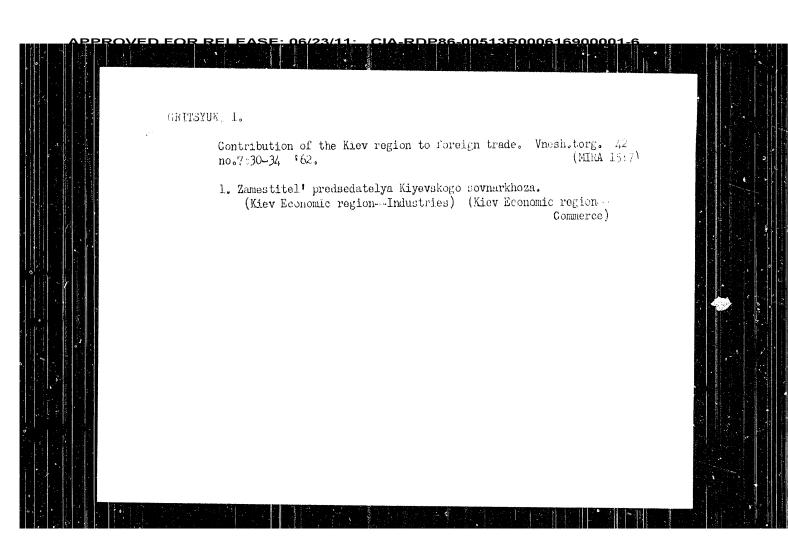
TOPIC TAGS: nuclear fission, thermal neutron fission, fission fragment, neutron emission, symmetric fission

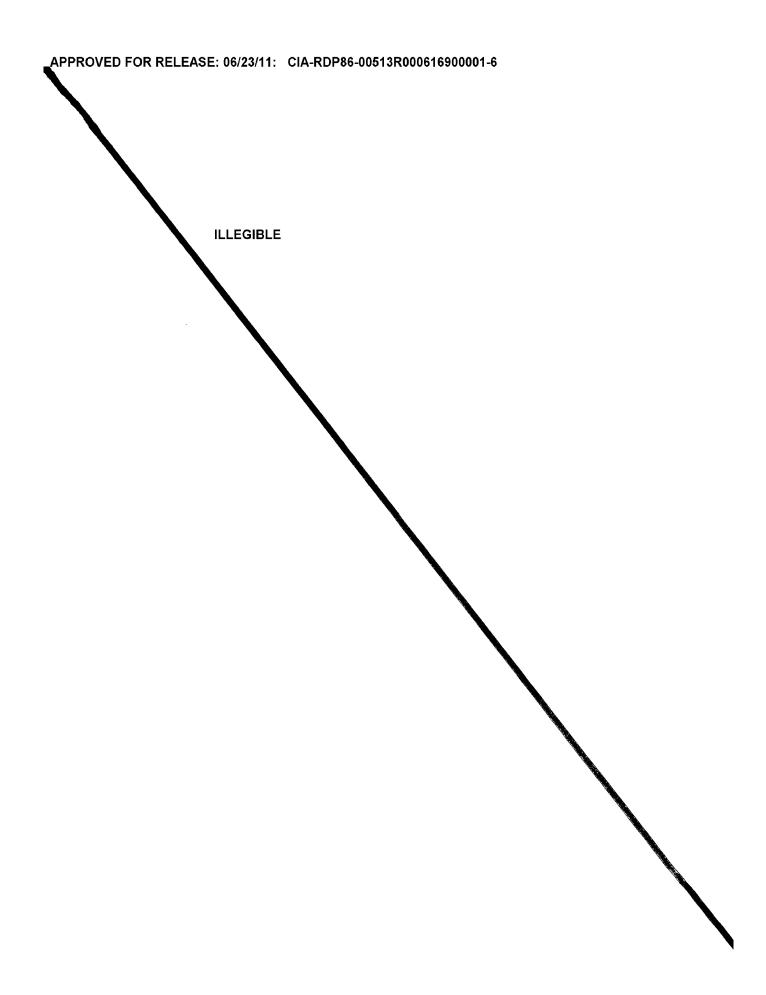
ABSTRACT: This is a continuation of earlier measurements (ZhETF v. 43, 329, 2053, 1962; Nucl. Phys. v. 38, 193, 1962 and v. 41, 92, 1963; ZhETF v. 46, 1197, 1964) of the total number of neutrons emitted by fragments as a function of their mass ratio in the present work the authors measured the neutron emission from fragments of v^{233} , v^{235} , and v^{239} separated by an improved technique, and discuss the accuracy of the information obtained. The experimental technique was the same as in the earlier work, with the fragment mass determination made by means of a double-grid ionization chamber and a liquid-organic scintillator neutron detector. To assess

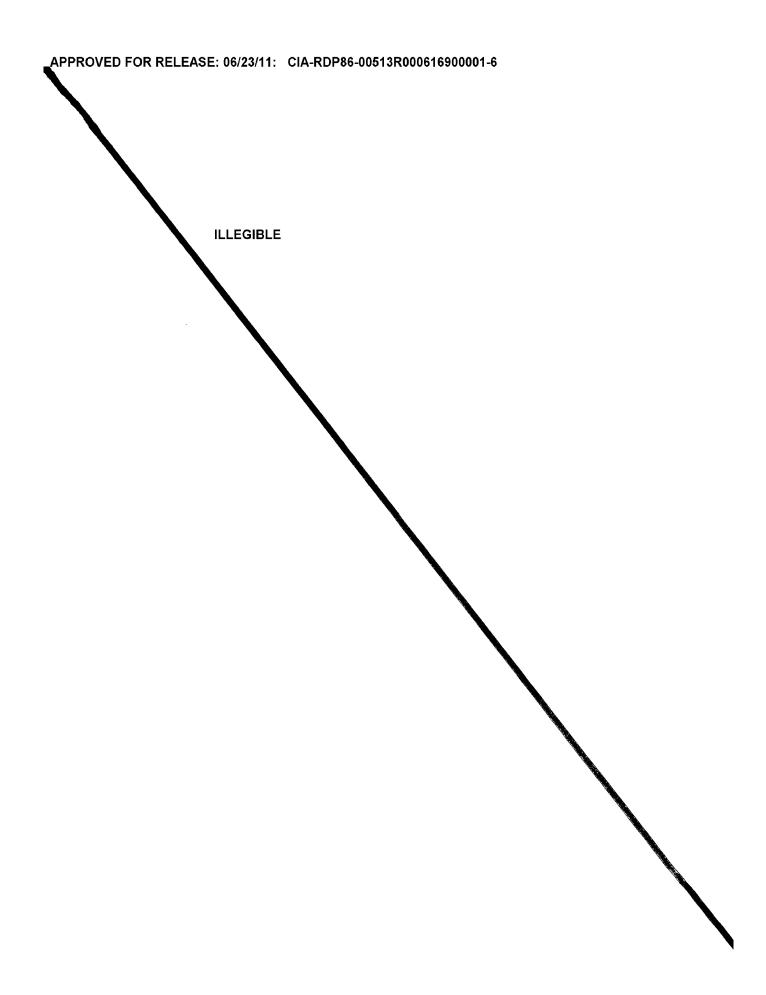


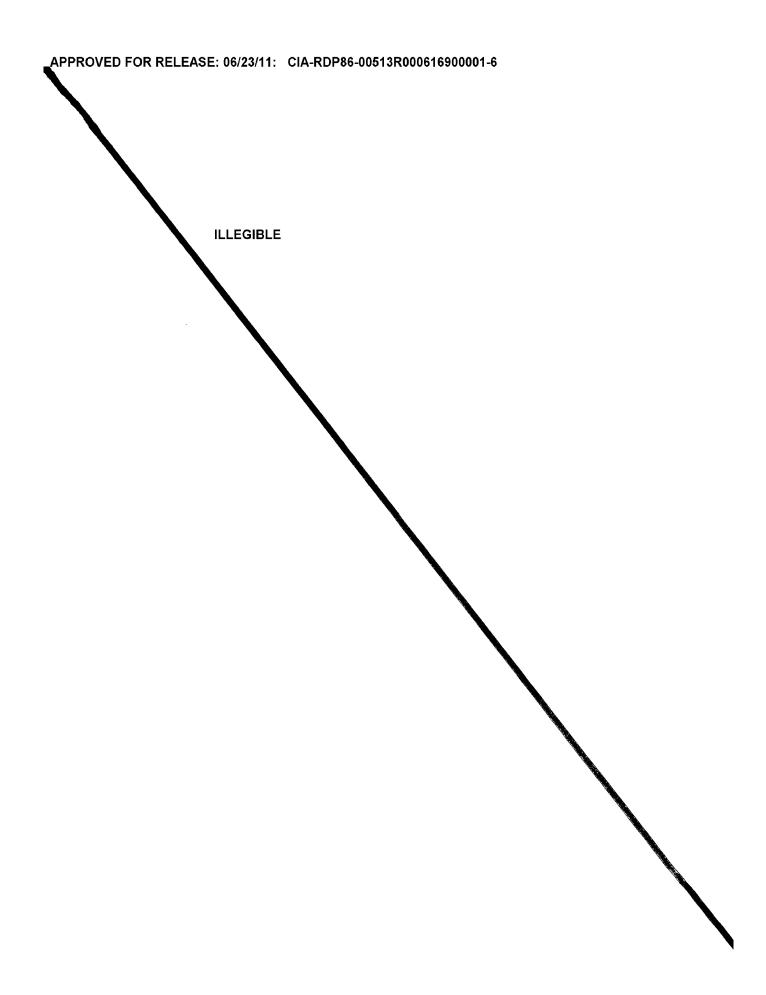


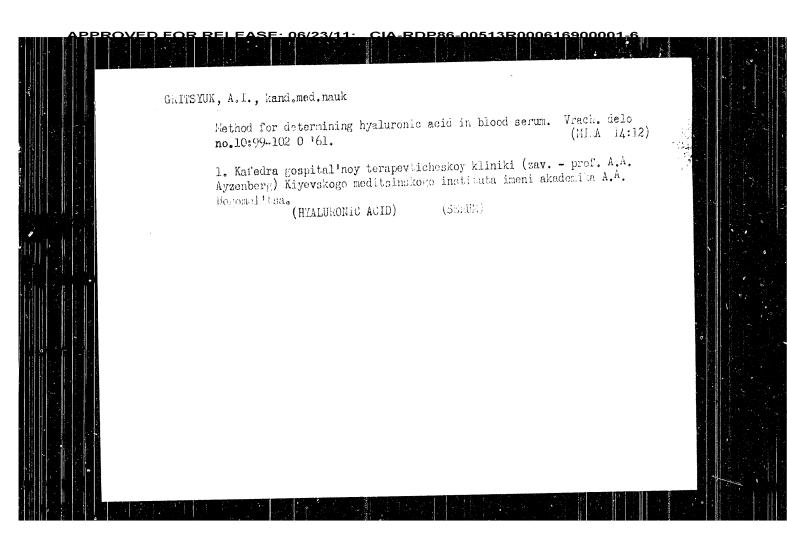


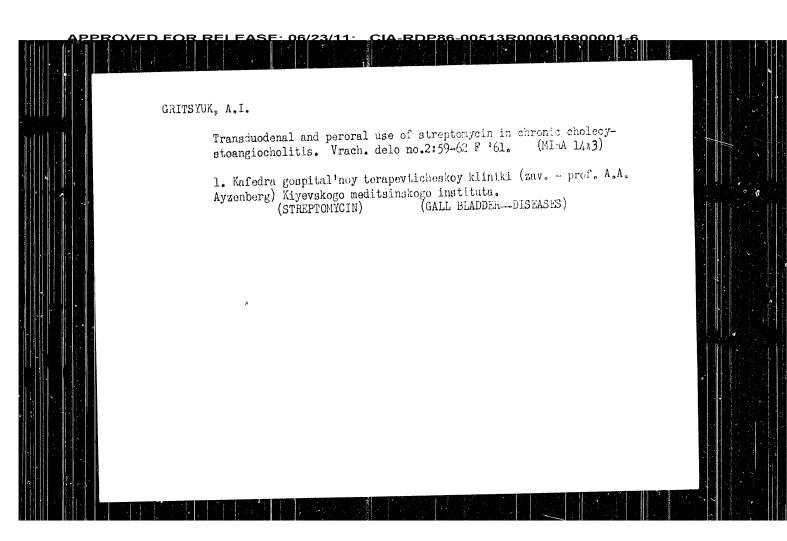


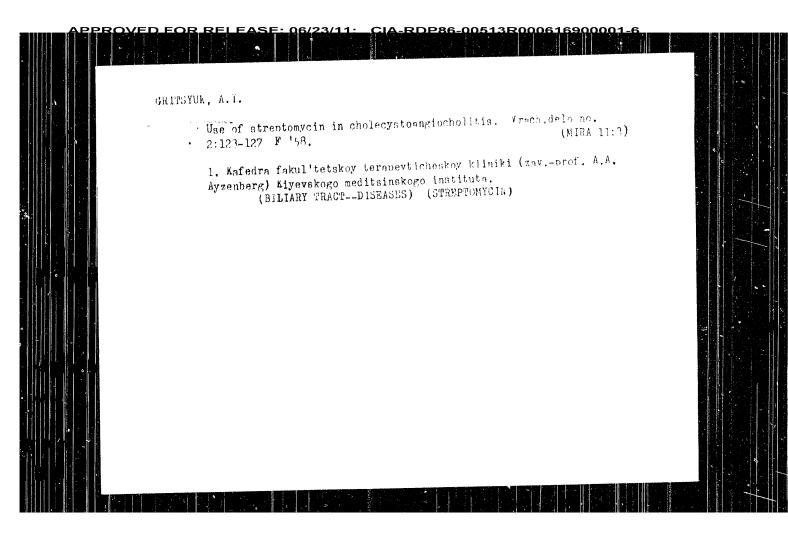


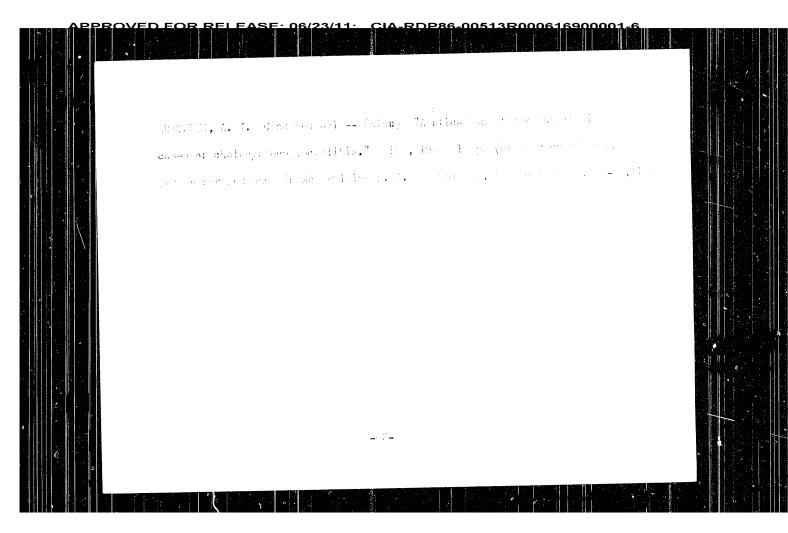


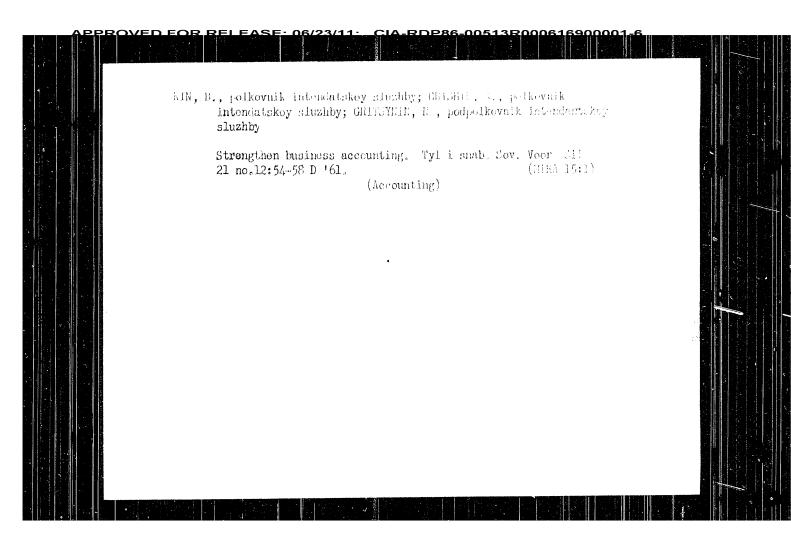












DOURDE CONE: UR/0367/66/004/654/6678/0682 ACC NR: AP7008881 ANTHOR: Orluggia, V. T.--Gricyna, V. T.; Klyucharev, A. P.; Remayer, V. T.-bedinev, V. V. Oldi none NUMBER : Short-period Isomers La sup 137m, La sup 177m, and Ir sup 187m Tollo Mod: Lacher, genera quantum, Tanthanum, Lutecium, Iridium SUB 300%: 00 ABSTRACT: The results of the investigation of two new short-period isomers L_a^{137m} and L_a^{172m} and a previously found (V. V. Remayev, V. T. Gritayna, Yu. S. Korda; Zheff, 44, 1147, 1963) isomer L_a^{157m} are presented. The excited states of the lanthanum and lutecium nuclei were obtained in the irradiation of barium and ytterbium targets by protons. The isomer state Lal37m decays with a half-life 12±4 msec, emitting $^{230}\pm10$ keV and approximately 450 keV γ -quanta. The half-life of the Lul72m isomer is 450±20 µsec and its γ -ray energy spectrum consists of lutecium x-rays and a 68±5 keV γ -transition. An additional γ -line with the energy 488 ± 5 keV was found in the γ -spectrum of the Ir 187m isomer. Decay schemes are suggested for all three isomers. The isomer state of the Lal37 nucleus should probably be interpreted as a three-particle one. Further, an isomer activity with a half-life 0.75 msec and γ -ray energies 180, 280, and approximately 400 keV was found in the irradiation of an Yb174 isotop target by fast protons. Orig. art. has: 5 figures and 1 formula. [Based on authors' Eng. abst.] [JPRS: 39,658] UDC: none Card 1/11100 1929

L 13619-63

ACCESSION NR: AP3003096

agreement with the statistical theory of compound nucleus formation, but in some cases the numerical values obtained experimentally deviated from the theoretical predictions. Orig. art. has: 3 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut akademii nauk Ukrainskoy SSR (Physicotechnical Institute, Academy of Sciences, UkrSSR); Khar'kovskiy gosudarstvenny*y universitet (Kharkov State University)

SUBMITTED: 21Dec62 DATE ACQ: 23Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 005 OTHER: 006

L 13619-63

EWT(m)/BDS AFFTC/ASD

ACCESSION NEW AP3003096

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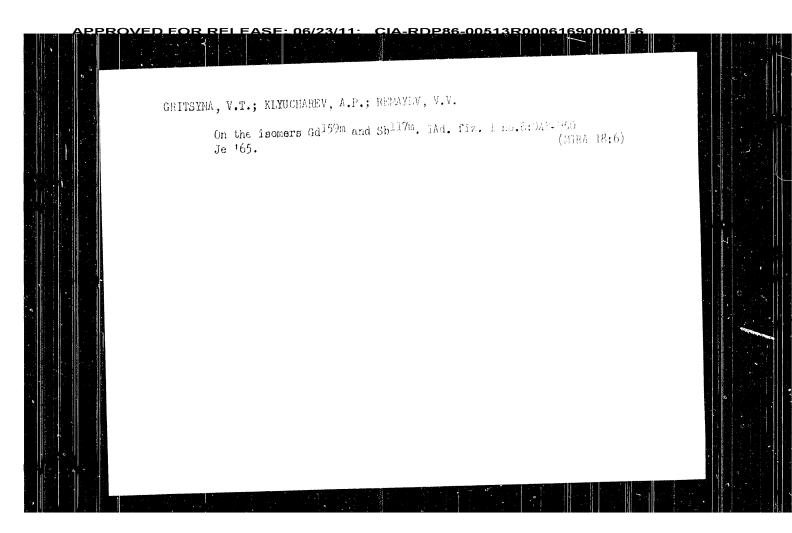
AUTHOR: Gritsy*na, V. T.; Klyucharev, A. P.; Remayev, V. V.; Reshetova, L. N.

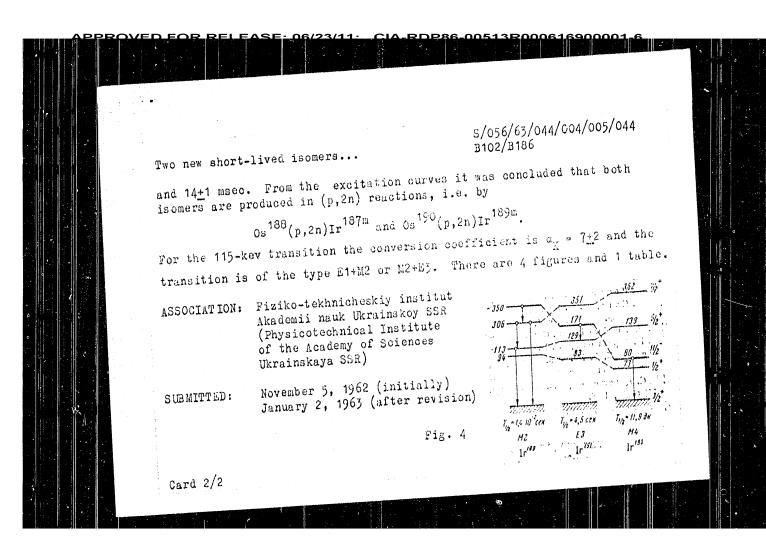
TITLE: Ratio of the cross sections for the production of the isomer and ground states of nuclei in the (p,n) reaction at energies from threshold to 20 MeV

SOURCE: Zhurnal eksper. 1 teor. fiziki, v. 44, no. 6, 1963, 1770-1774

TOPIC TAGS: p-n reaction, cross section, ground state, isomer state, compound nucleus model

ABSTRACT: Measurements are made of the cross sections of the nuclear reactions Y sup 89 (p,n) Zf sup 89m, Y sup 89 (p,n) Zr sup 89, Pr sup 141 (p,n) Nd sup 141m, Pr sup 141 (p,n) Nd sup 141g, Au sup 197 (p,n) Hg sup 197m, and Au sup 197 (p,n) Hg sup 197g, aimed at investigating their mechanism for incident-particle energies from threshold to 20 MeV. The reaction cross sections were measured by the induced activity method, with the (p,n) reaction excitation determined by means of foil stacks. The 20 MeV protons were obtained from a linear accelerator. The ratios of the cross sections for the production of the isomer and ground states were determined and were found for the most part in





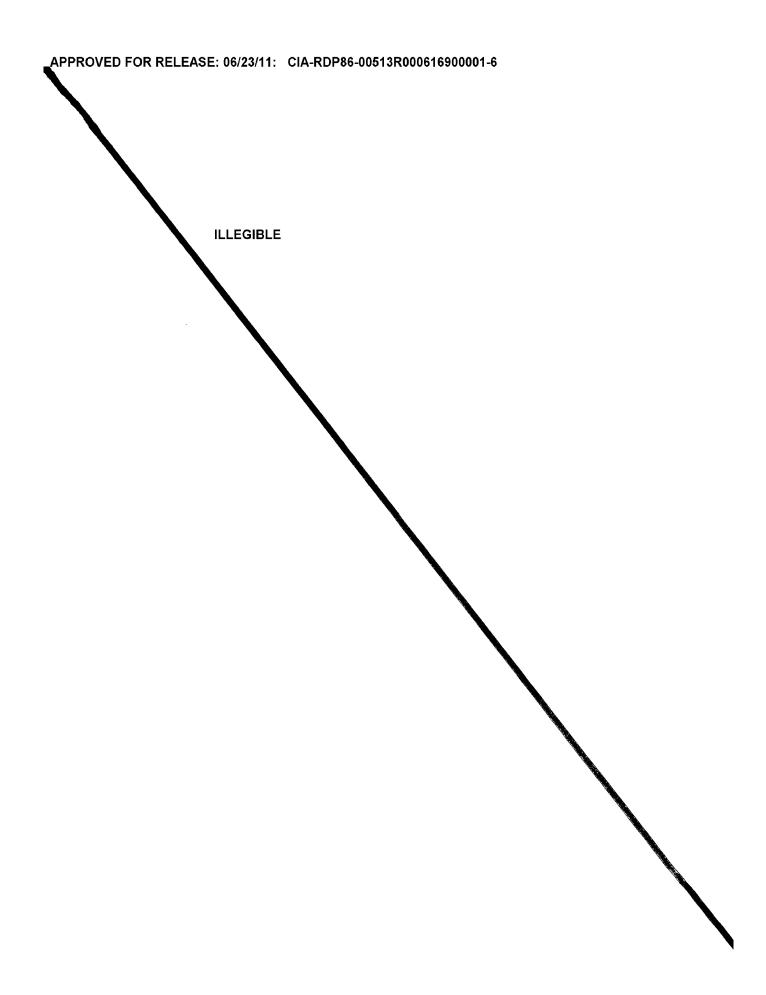
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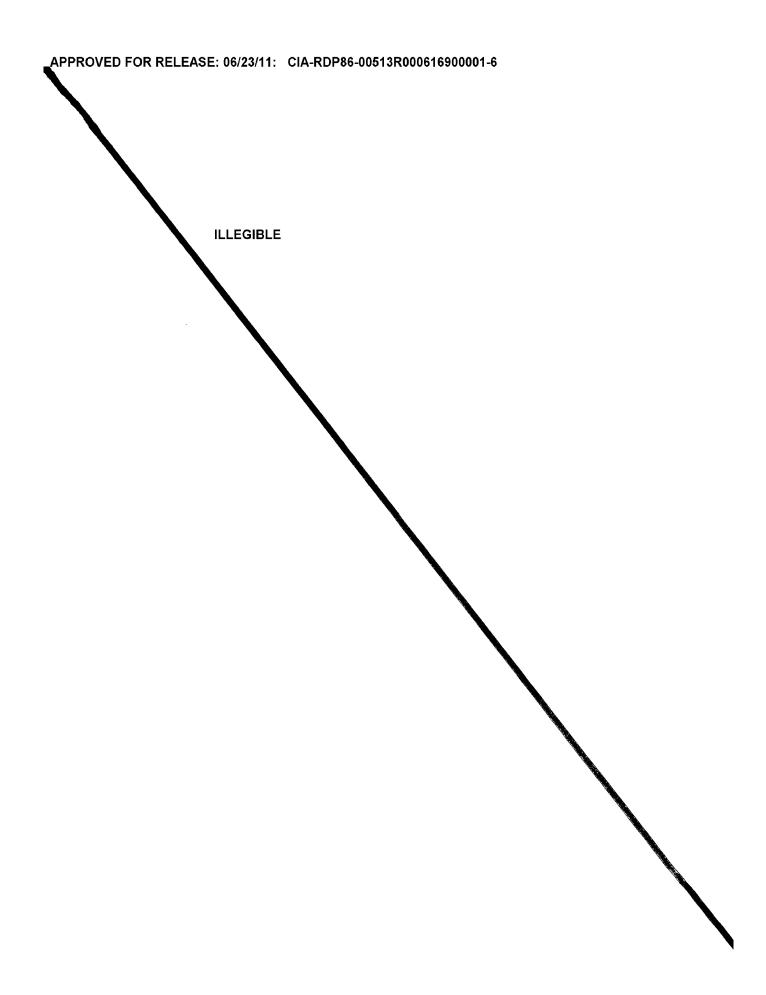
Remayev, V. V., Gritsyna, V. T., Korda, Yu. S.

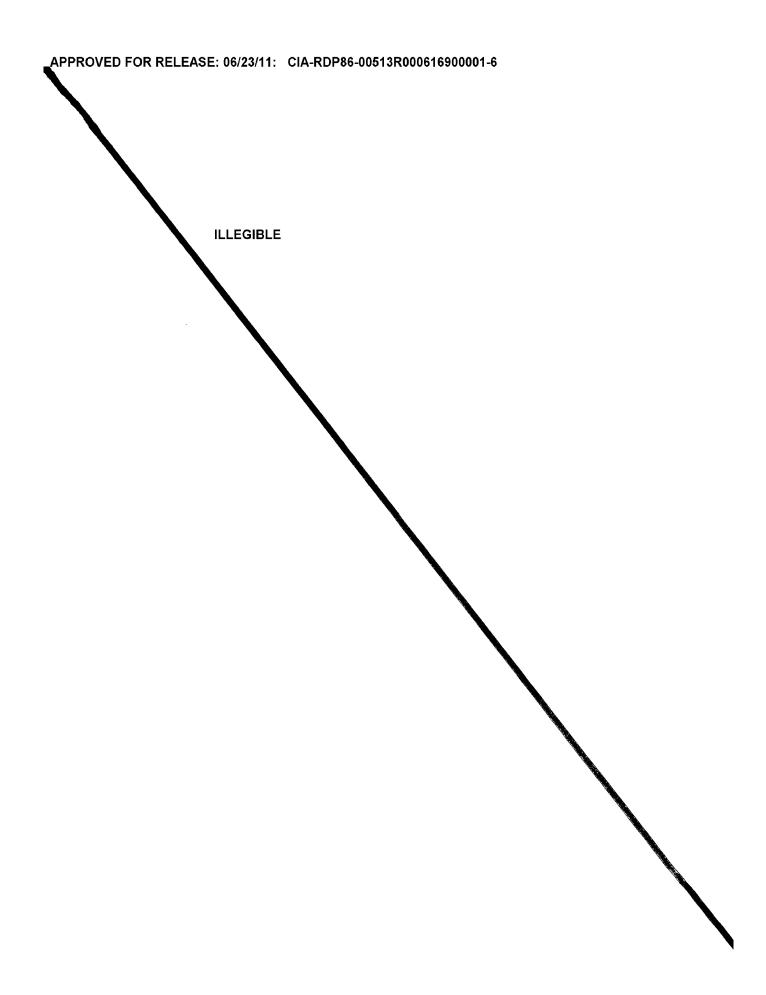
Two new short-lived isomers - Ir^{187m} and Ir^{189m} AUTHORS:

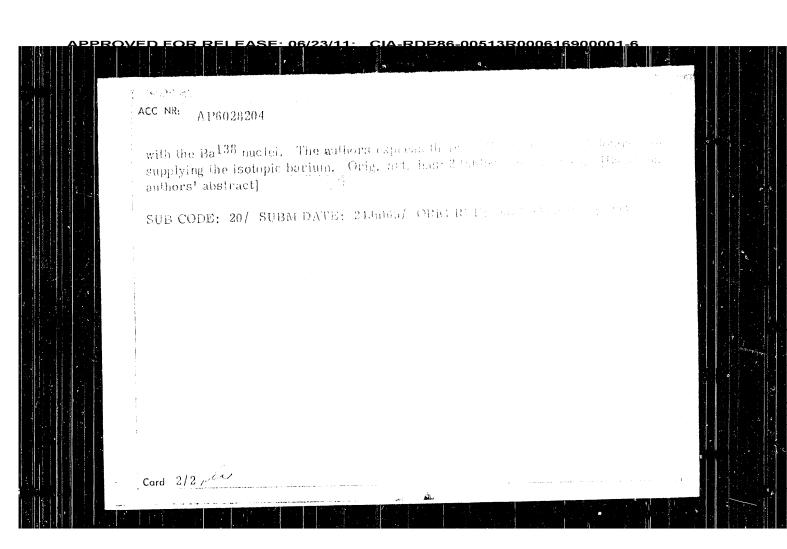
Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, TITLE: PERIODICAL: no. 4, 1963, 1147 - 1150

TEXT: The authors continue previous investigations (ZhETF, 39, 973, 1960; 42, 408, 1962) on the Y-ray spectrum observed on bombarding natural osium (0s 184-192) by 20-Mev protons. They had discovered an intense y-radiation with $T_{1/2}$ = 10⁻² sec and E_y = 0.320 MeV. In order to identify this activity, specimens enriched in 0s¹⁸⁸, 0s¹⁸⁹, 0s¹⁹⁰ or 0s¹⁹² (75.4, 71.9, 76.1) and 98.1%, resp.) were exposed to the 20-Mev proton beam from a linear accelerator. On comparing the y-yields it was found that two new isomers must exist: one for the Os sample emitting 115-kev gammas and one for Os with 120, 180 and 300-kev gammas. Both spectra had a common intense peak at 65 kev. The half-lives of the isomers was determined to be 29+2 msec Card 1/2









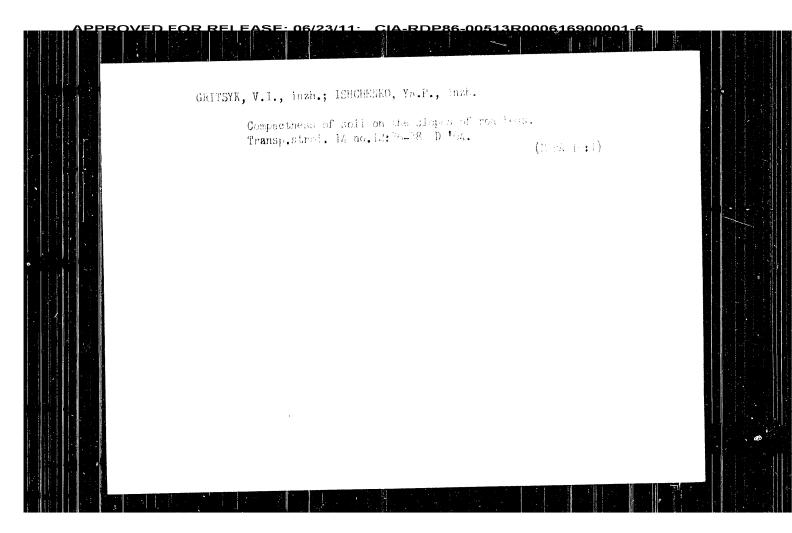
ACCING AP6028204 SOURCE COLD': YR 0.567/colores to the first AUTHOR: Gritsyna, V. T.; Riyucharev, A. P.; Rougavev, E. ORG: none

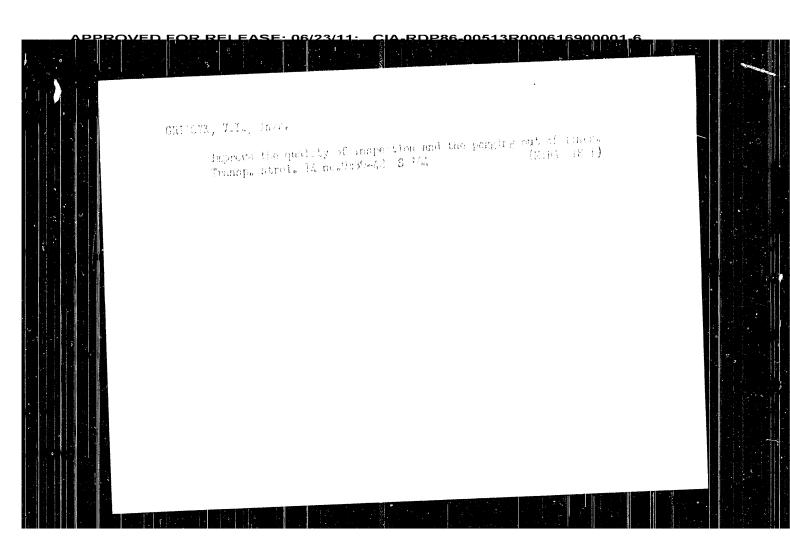
TITLE: Two new shorf-lived isomers of 1a134m and 1a134m accepts

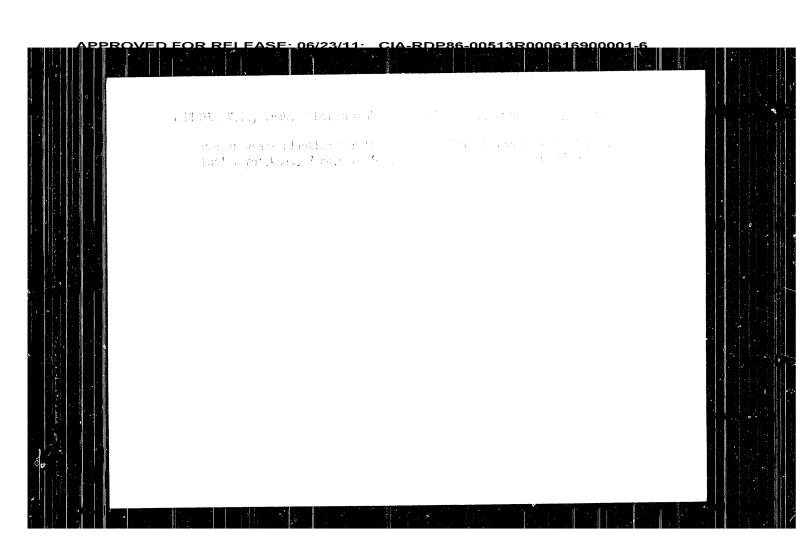
SOURCE: Yadernaya fizika, v. 3, no. 6, 1968, 000-366

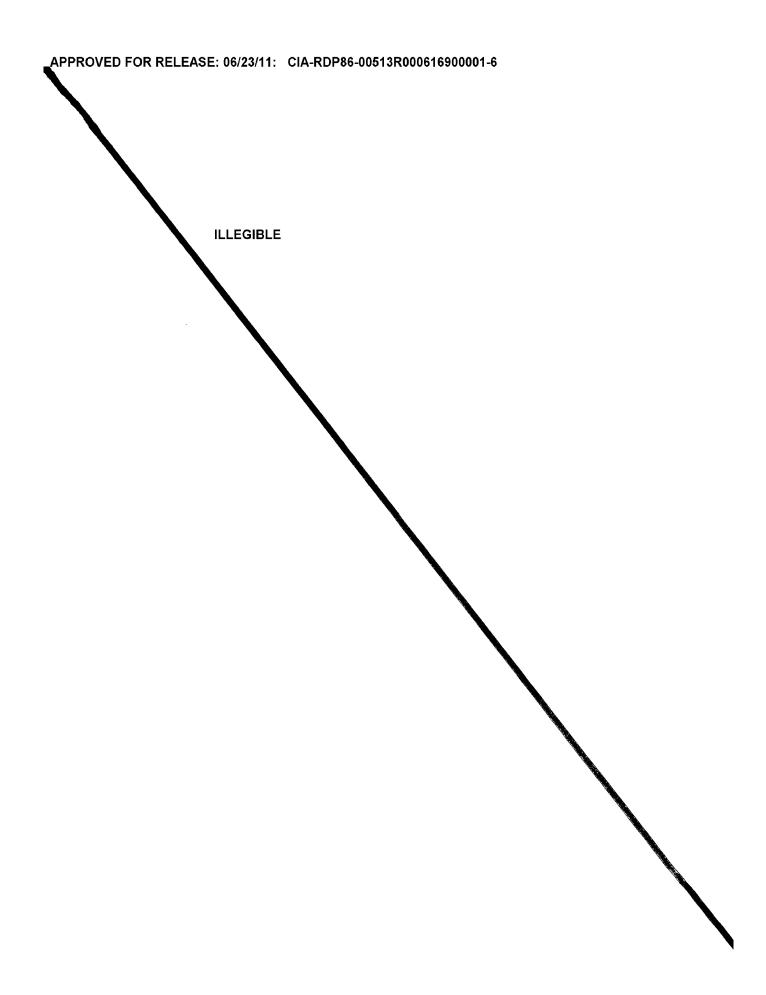
TOPIC TAGS: isomer, short lived isomers, landpreasa, transition and isotropic barium, neutron interaction, isomer result too.

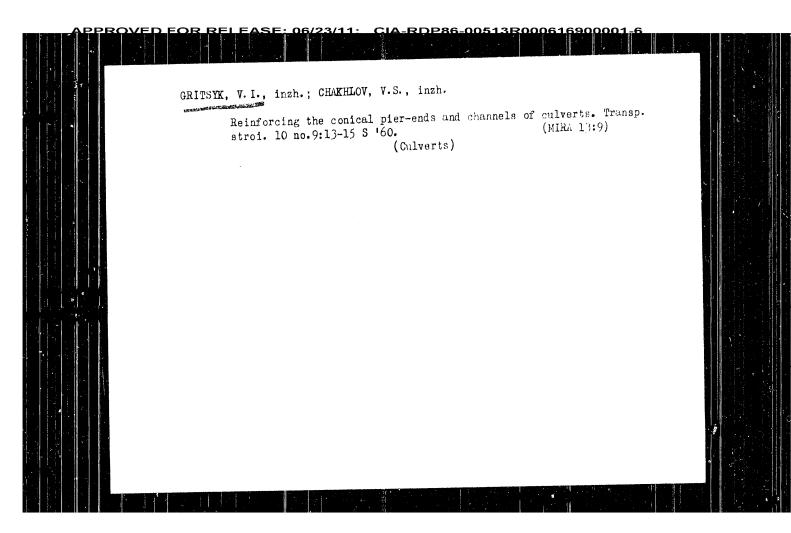
ABSTRACT: New La131m and La136m isomers covered to the construction were irradiated by 20-shey protons. The manner of the object to the construction is a 1a131 nucleus with a half-life of 15B \$ 5 years and a respective field in the reaction of Paties because the field in the reaction of Paties because the field in the reactions. The Fortier is the construction in the field in the reactions. The Fortier is the field in the preliminary data, the isomer irradiation is forced to the field in the isomer irradiation is forced to the field in the isomer irradiation is forced to the field in the isomer irradiation is forced to the field in the isomer irradiation is forced to the field in the isomer irradiation is forced to the field in the isomer irradiation is forced to the field in the isomer irradiation is forced to the field in the isomer irradiation is forced to the field in the isomer irradiation is forced to the field in the isomer irradiation is forced to the field in the isomer irradiation is forced to the field in the interaction.

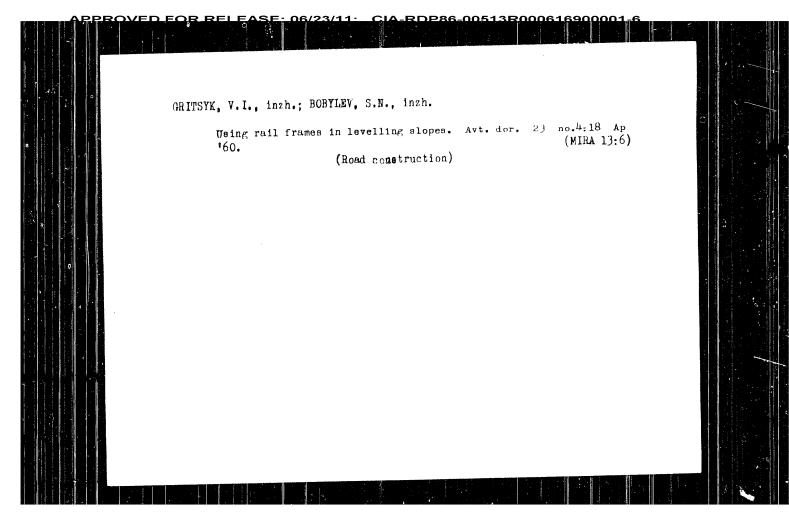


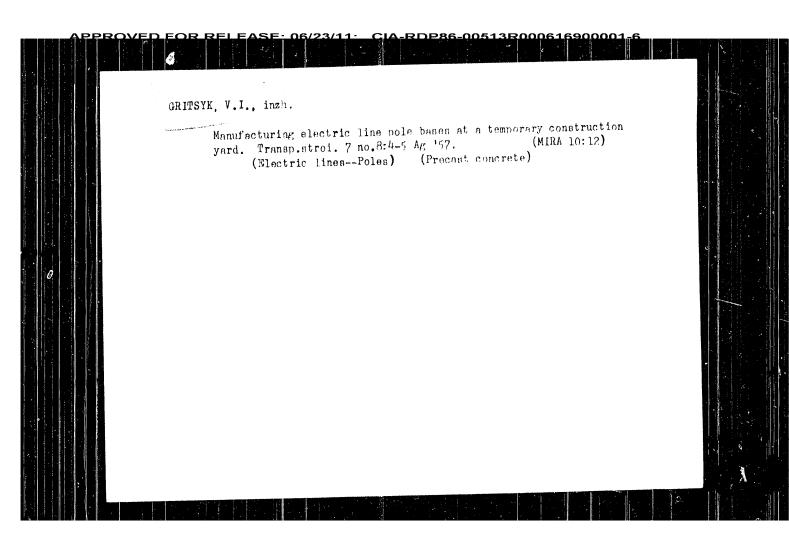


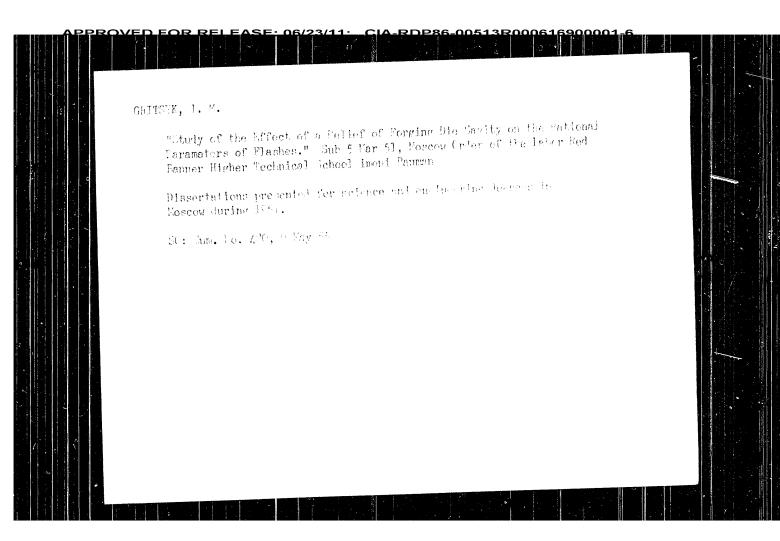


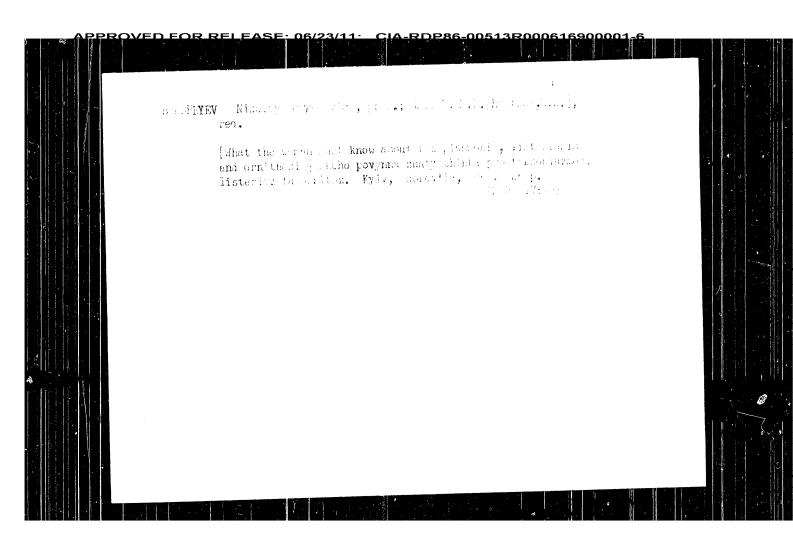


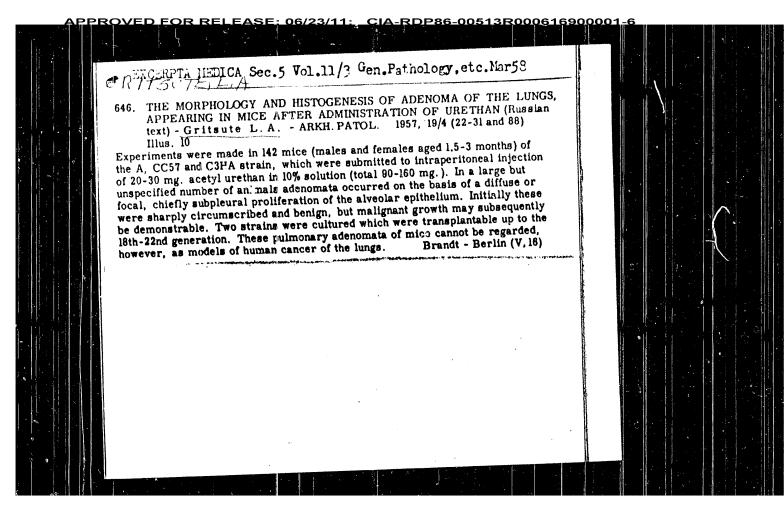




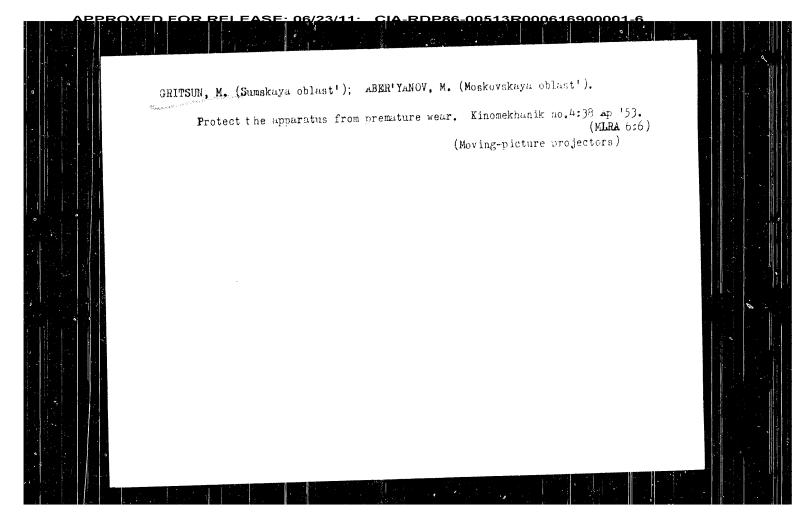


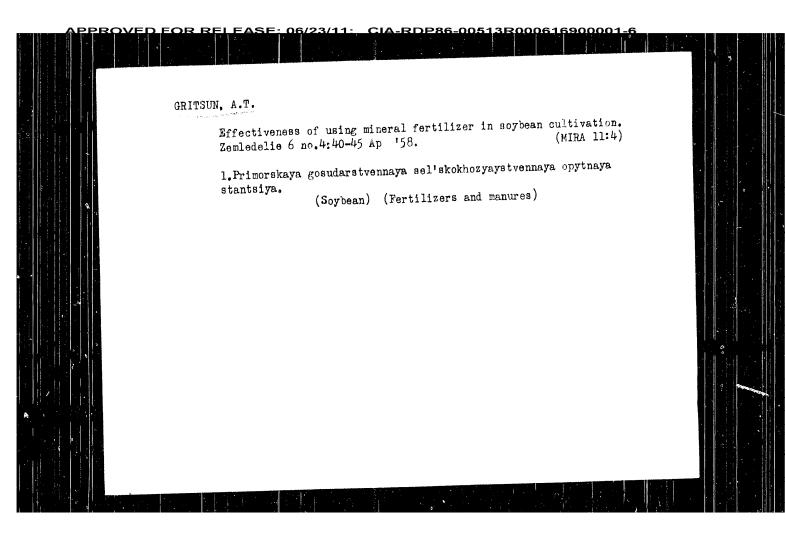


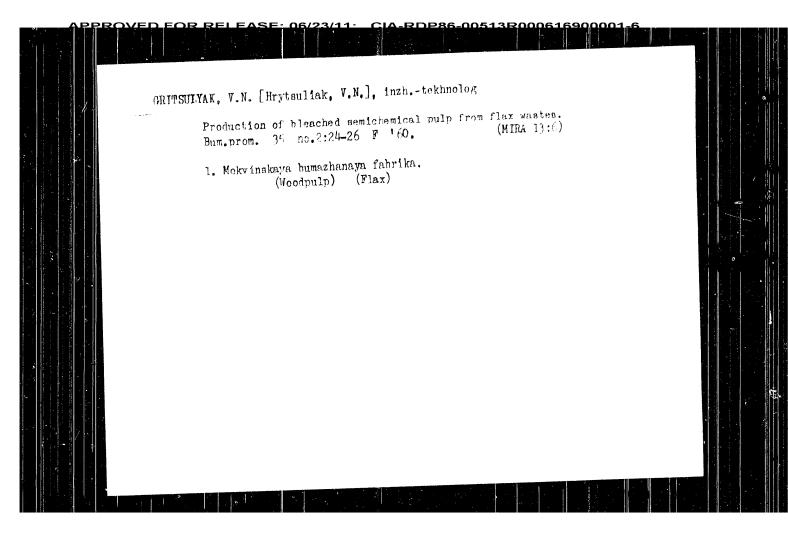


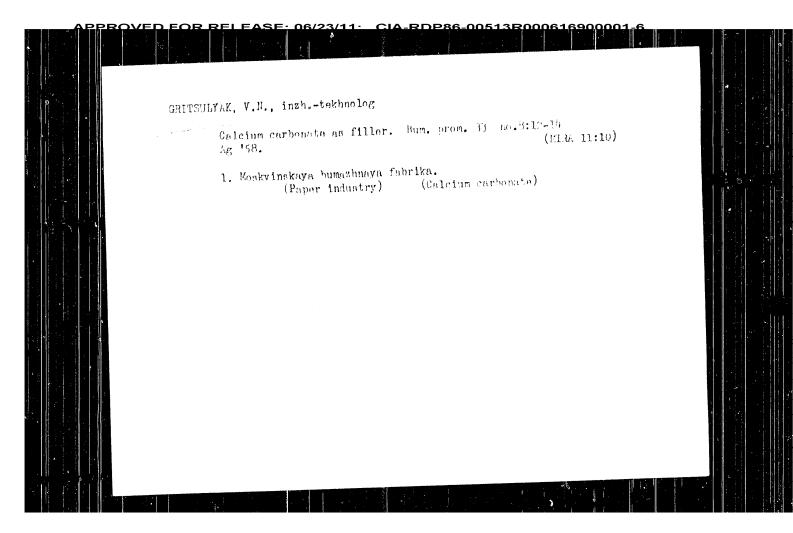


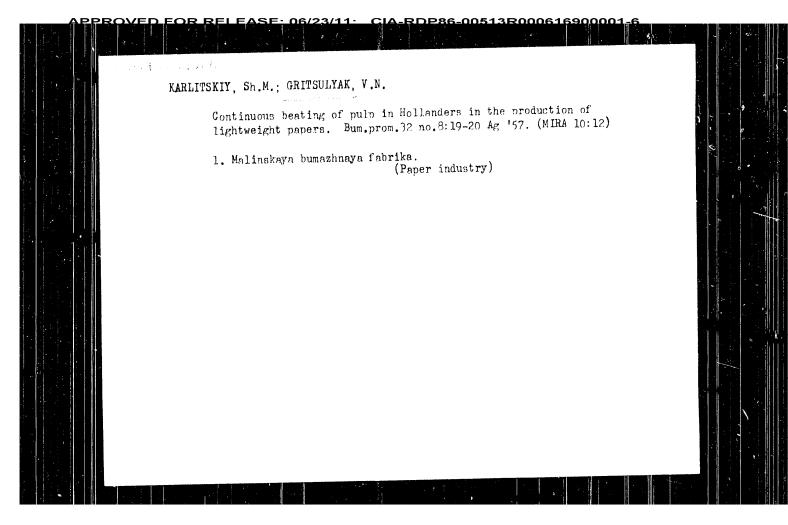
Gritoun M.D. and Redike, A.N. 130-58 5-15/16 AUTHORS: Visit to the Metallurgists of the G.D.R. (U metallurgov TITLE: GDR) Metallurg, 1958, Nr 5, pp 37 - 39 (USSR). PERIODICAL: After a brief account of the proceedings at the ABSTRACT: meeting in Leipzig of the German Mining and Metallurgical Society on November 14 - 15, 1957, the authors give a detailed account of the iron-making plant and practice at the "Ost" Works in Stalinstadt and the "Vest" Works in Kalbe (low-shaft blast furnaces) which they visited after the meeting. There are 3 figures and 2 tables. Tull'skiy metallurgicheskiy kombinat (Tuls ASSOCIATION: Metallurgical Combine) and Novo-Tul'skiy metallurgicheskiy zavod (Novc-Tul'skiy Metallurgical Works) Card 1/1

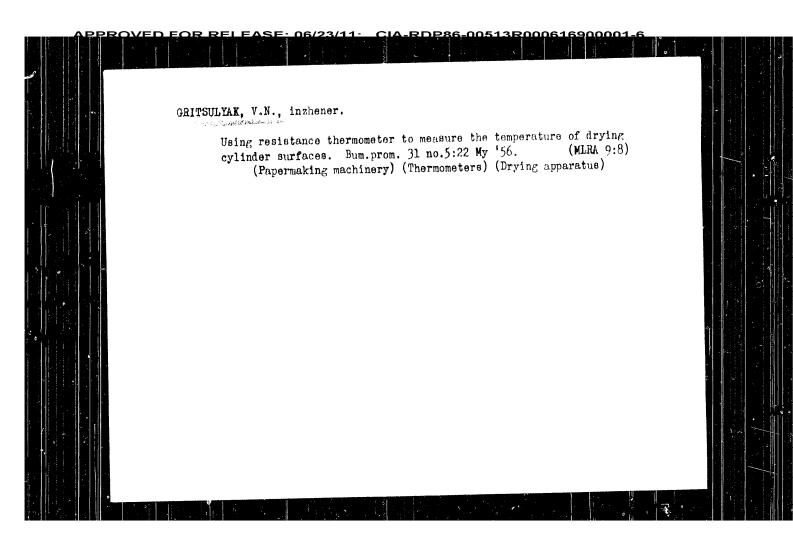


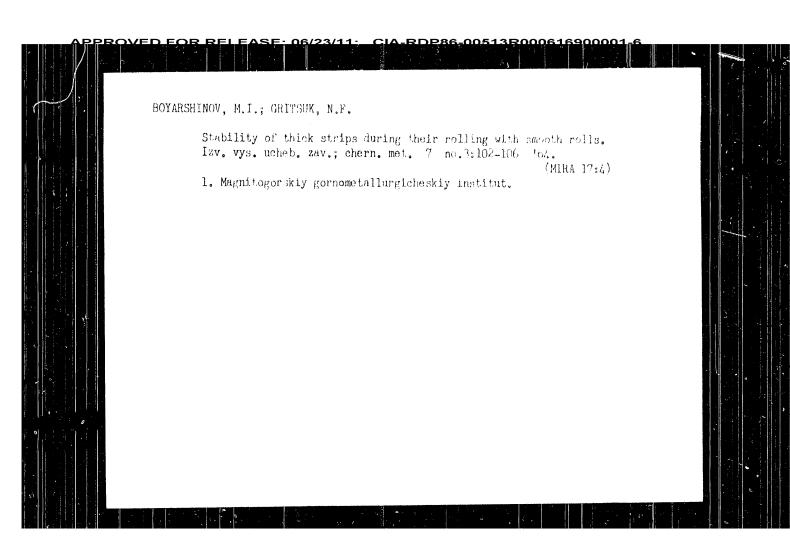


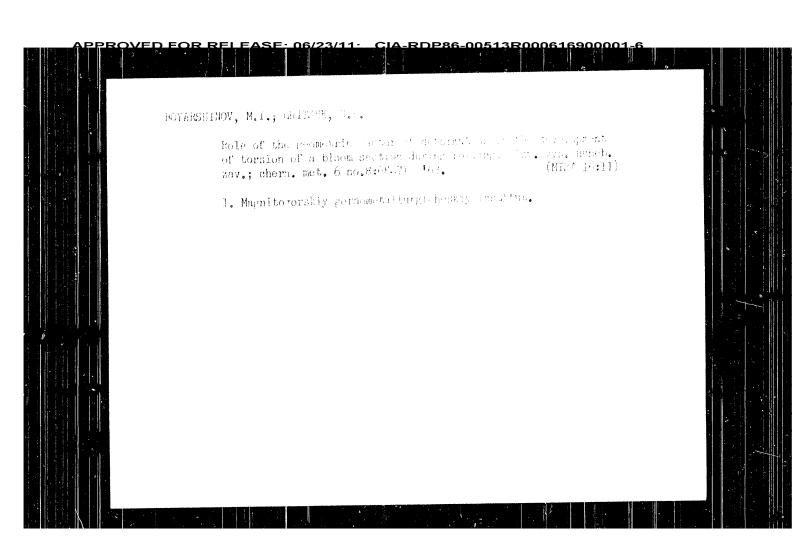












\$/137/61/000/007/013/072 A060/A101 Gritsuk, N. F. AUTHOR: On the problem of stability of high strips under rolling TITLE: PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1961, 4, abstract 7D23 ("Tr. Konferentsii: Tekhn. progress v tekhnol. prokatn. proiz-va". Sverdlovsk, Metallurgizdat, 1960, 195-206) The factors affecting the stability of a strip in rolls during the rolling process are considered: the ratio of the initial geometrical dimensions of the strip, the degree of reduction, the round-off radii of the corners, the amount of initial rhombicity, etc. The derivation of the stability equation is given for a rectangular strip having some initial rhombicity. The result of solving the equation is given in the form of a formula. On the basis of the formula for the stability of a rectangular strip, graphs of Δ h_{av} vs H/B are constructed as applied to rolling on the smooth barrel of a blooming mill.

[Abstracter's note: Complete translation]

Recommendations are proposed for the elaboration of new groovings for blooming

I. Getiya

mills.

Card 1/1

3/130/66/066/010/008/09/XX A006/A001 Causes for the Skewing of Faces and Twisting of Blooms During Rolling Process muln causes requiring immediate elimination, the twisting and skewing of faces of Flooms may also be caused by the following factors: displacement of the blooming rollers toward each other in the axial direction; wearing out and skewing of the first rollers of the operating roller table; skewing of the rollers in the vertical plane: "oblique" delivery of the Ingot, the shape of the bloom front edge Many of the numbered factors may act simultaneously making the detection of the actual causes for unstable rolling rather difficult. There are 4 figures and 1 table. ASSOCIATION: Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000616900001-6

S/130/60/000/010/008/009/XX A006/A001

Causes for the Skewing of Faces and Twisting of Blooms During Rolling Process

coefficient of widening, $(\beta = 1.02 - 1.03)$. An increased skewing of the bloom under the effect of the geometrical factor of deformation during the first passes is accompanied by the reduction of the cross section and may entail at the end of rolling on the flat roller section twisting of the bloom in the rollers, attaining in individual cases 80-120 mm. A dependence was established for edge passes between the bloom width B, the ratio of its sides K, and the magnitude of the admissible reduction $\Delta h = \Delta h = (0.2 - 0.25) \frac{B}{K}$. In edge passes with correctly calculated grooves the stability conditions do practically not limit the reduction magnitude. A raised stability of blooms in passes through box grooves is obtained by the reliable clamping in the basic portion of the groove, starting with the first pass, To improve the centering of the bloom the width of the first groove in the bottom portion must be 3 - 5% larger than the width of the bloom. The optimum allowance of box grooves was found to be 22 - 15%. A negative effect of the non-uniform heating of ingots in the pits appears during rolling when the cross section of the ingot has been reduced to a square of about 500 \times 500 mm. The skewing and twisting of blooms delivered from the rollers is often a sign of unqualified heating of the ingots. An analysis of such phenomena was previously made by I. M. Pavlov Besides the aforementioned

Card 2/3

3/130/65/555/615/658/659/XX A006/A001

AUTHORS:

Gritsuk, N. F., Merekin, S. V.

TITLE

Causes for the Skewing of Faces and Twisting of Blooms During

Rolling Processes

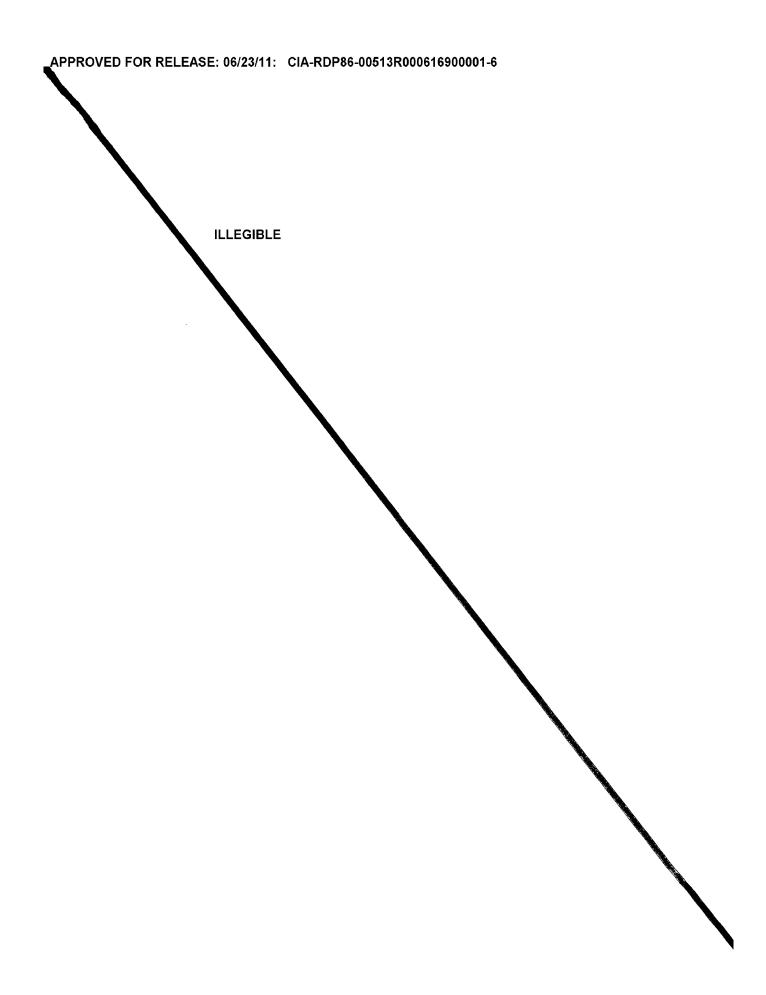
PERIODICAL: Metallurg, 1960, No. 10, pp. 24-26

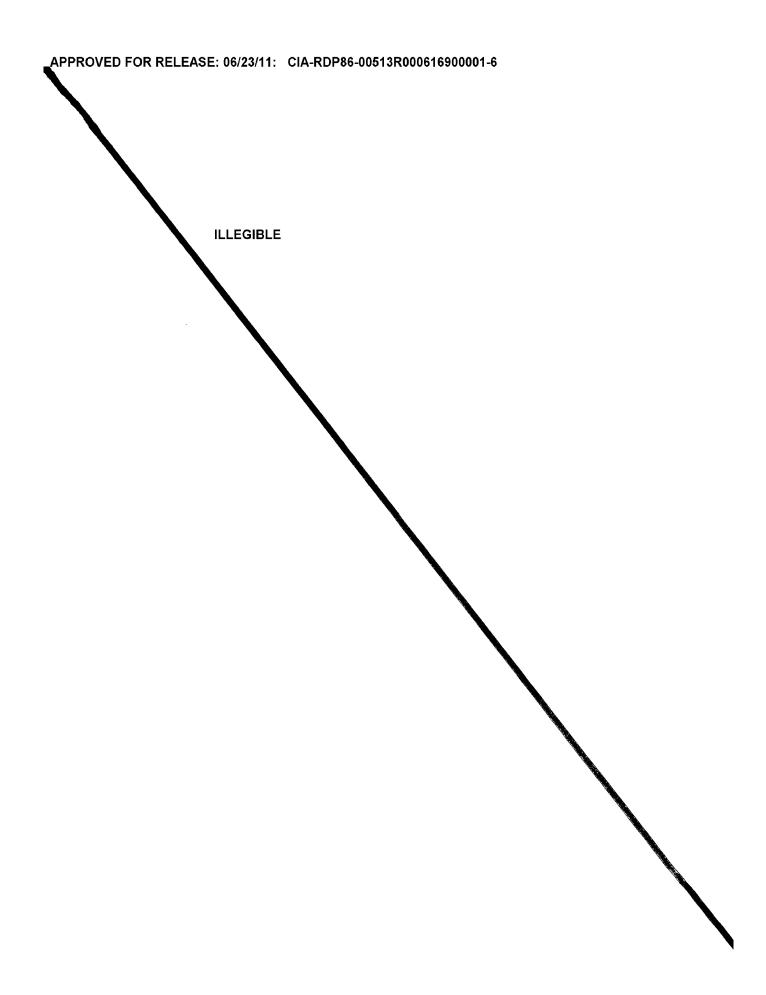
TEXT: Causes of the skewing of faces and twisting of blooms during rolling process are studied. An increase in the skewing of blooms may be explained by the geometrical factor of deformation and is analytically determined by the following formula:

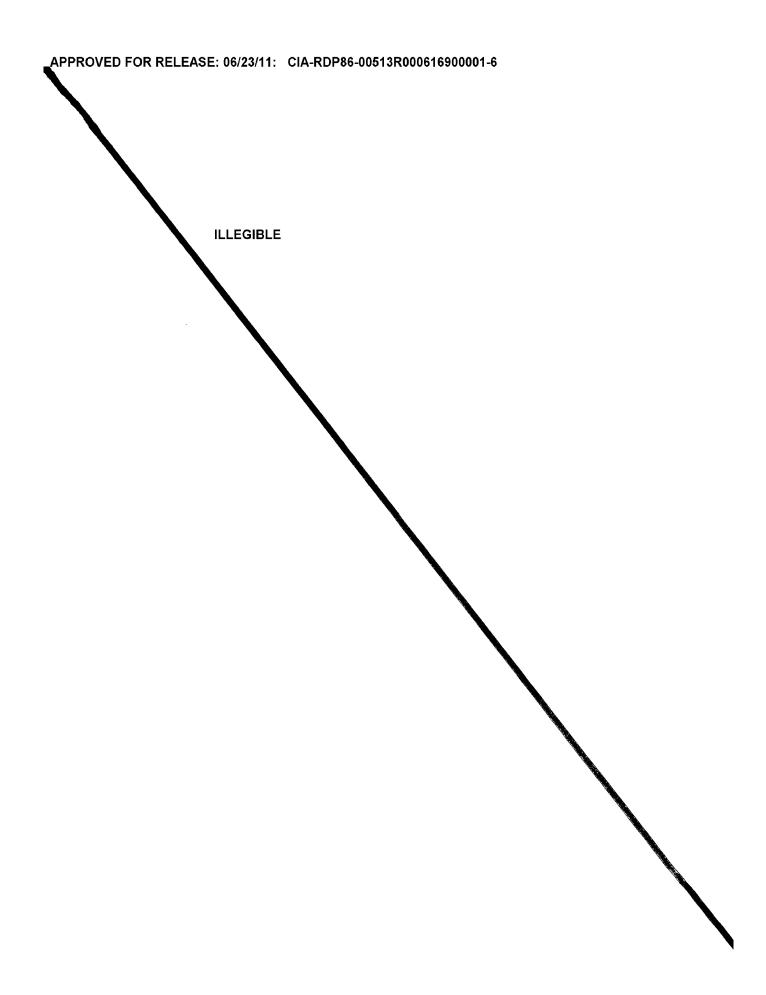
where Δd_i is the difference in the length of bloom diagonals prior to rolling; [Abstractor's Note: Subscripts f and i are translations from "konechnyy" = final and "nachal'nyy" = initial]; Δd_i is the difference in the length of bloom diagonals after rolling on the flat roller section; n is the number of turnings. H, B,h, b, are the initial and final dimensions of the bloom and β is the mean

Card 1/3

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New Designs of Roller Rolling Equipment

125-1-12/17

suggested that the rollers should be made of ordinary engineering steels and hard-faced with wear-resistant alloys and that high-grade textolite is a suitable bearing material for the finishing and pre-finishing stands with rolling speeds over 6-6.5 m/sec. The possibility of using high-chromium iron inserts instead of the rollers at the inlet to the roughing stands is briefly mentioned. In the design of the equipment, Soviet and foreign practical experience is said to have been utilized. There are 4 figures.

ASSOCIATION: Magnitogorsk Metallurgical Combine (Magnitogorskiy metallurgicheskiy kombinat)

AVAILABLE: Library of Congress

Card 2/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000616900001-6

130-1-12/17

AUTHORS: Shternov, M.M., Candidate of Technical Sciences, and

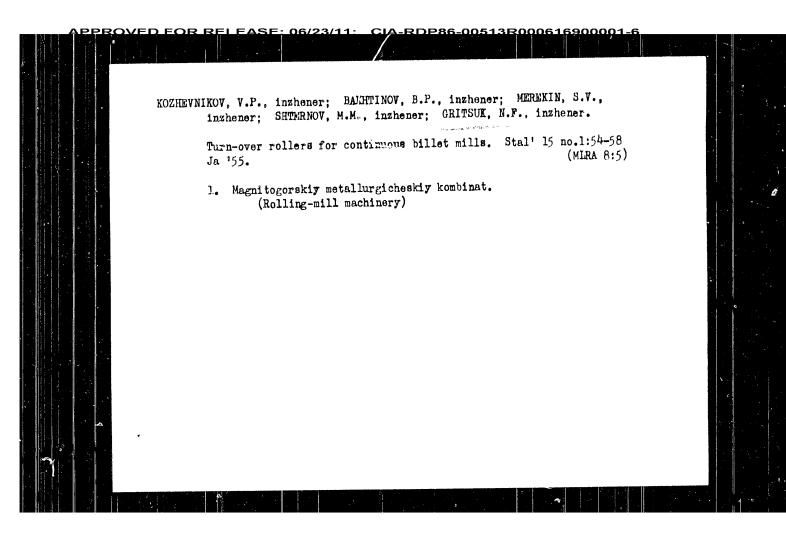
Gritsuk, N.F., Engineer.

TITLE: New Designs of Roller Rolling Equipment (Novyye konstruktsii

rolikovoy valkovoy armatury)

PERIODICAL: Metallurg, 1958, No.1, pp. 23 - 28 (USSR)

ABSTRACT: Some designs of guide blocks developed in connection with the increasing speed of rolling are described. The equipment described was designed by the roll-pass department of the Magnitogorsk Metallurgical Combine in collaboration with mill operators for the automatic 300 mill. The mill is intended to roll small channels, angles, rounds, squares and strip. It is of the cross-country type with ten working stands, the rolling speed in the finishing stands being 9-11 m/second with a billet weight of 200-500 kg. The article gives details of the front and back guide blocks for some of the products and discusses the advantages of these roller types over the friction types. The dimension of the guide blocks in relation to each other and the stand dimensions have been selected to minimise the amount of equipment required for the range of products rolled. The designs provide for the rapid changing of blocks and for mechanized movement along the barrel of the roll, and are based on the principle of the separation of parts Cardl/2 needing adjustment during work from the fixing elements. It is



CRITSUK, N.F.; FEDIN, V.P.; GUBERT, S.V., inch.; RUTUS, M.V., buch. Book reviews. Chart 25 mos6:503-500; 165 Je 165. (Mish 18:6) 1. Gosudarstvennyy soyuznyy institut po proyektirovaniya metallurgicheskikh zavodov (for Gabert, Butus).

5/137/61/000/010/005/056 A006/A101

APANGORS: Gerber, L. M., Gritsuk, L. D.

A method fo detecting leakages in pipes with the aid of compressed air

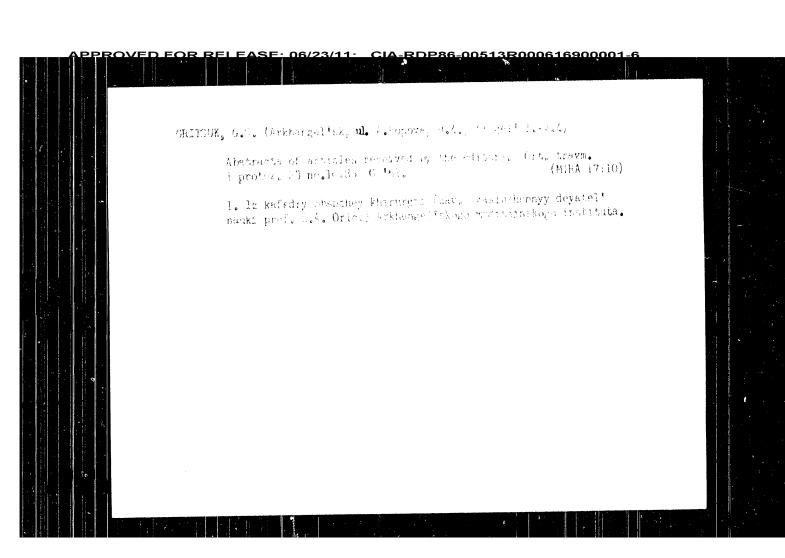
PERIODICAL: Referativnyy zhurnal, Metallurgiya. no. 10, 1961, 24, abstract 10V165. ("Sb. nauchn. tr. Gos. n.-1. i proyektn. in-t. metallurg. prom-sti "Tiprostal", 1960, no. 2, 88 - 91)

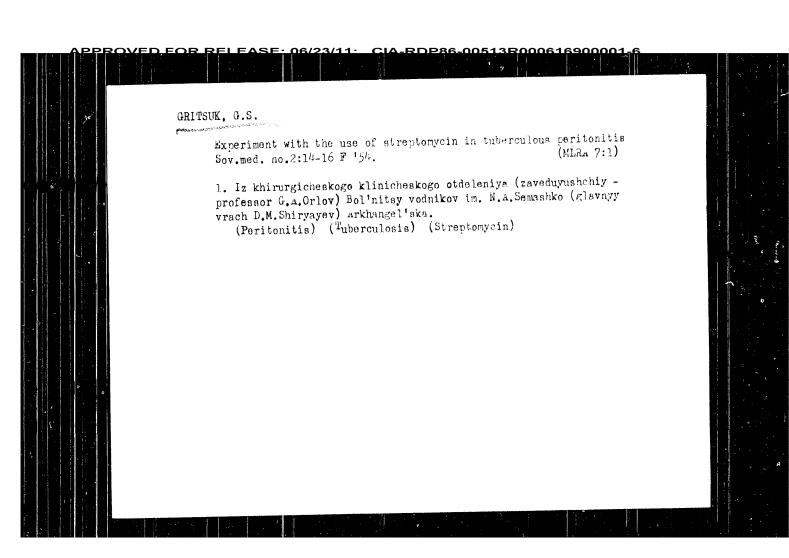
The method for detecting leakages in cooling pipes of the evaporation cooling system in blast furnaces, is based on the following process: compressed are is top-supplied to the pipe with the moving liquid, under a pressure exceeding the external one. Simultaneously the slide gate below the spot of leakage is closed. The air will then press out all the liquid above the spot of leakage and the "liquid-air" boundary will be established at the level of the leakage. The cooling must be preliminarily converted to cooling with technical water. For this purpose an indicator device was developed to determine the water level in pipes by examining them with the aid of radioactive isotope radiation.

[Acatracter's note: Complete translation]

A. Pokhvisney

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L 04452-67

ACC NR: AP6014144

lines without lightning arresters or (b) on the basis of the wet flashover voltage for lines protected by lightning arresters; no extra elements in the insulator string are required. The well-established opinion that surge voltages on no-arrester lines may reach 3 times phase voltage (3Uph) is questionable. The insulation level of a 500-kv line equipped with circuit-breakers that preclude dangerous are re-striking is largely determined by the surges that follow automatic-reclosing operations and that substantially depend on the power network configuration; only the surges arising under symmetrical 3-phase conditions need be taken into account. Simulated tests have shown that the probability of surges exceeding 2.6 Uph on a 420-km 500-kv line, operating in a transmission network, is very low. The surges exceeding 2.3 Uph have occurred rather seldom on actual 500-kv lines. In some cases, 500-kv lines should be protected by lightning arrowers, in others, by resistors shunting the arc-quenching circuit-breaker contacts. Orig. art. has: no figures, formulas, or tables.

SUB CODE: 09,10/ SUBM DATE: 21Jun65 / ORIG REF: 013 / OTH REF: 003

Card 2/2 25/

1. 04452-67

(A) SOURCE CODE: UR/0143/65/000/012/0001/0007 ACC NR: AP6014144

AUTHOR: Akodis, M. M. (Doctor of technical sciences, Professor);

Gritsuk, A. A. (Engineer); Smetanin, V. N. (Engineer)

institut)

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ORG: Ural Polytechnic Institute im, S. M. Kirov (Ural skiy politekhnicheskiy

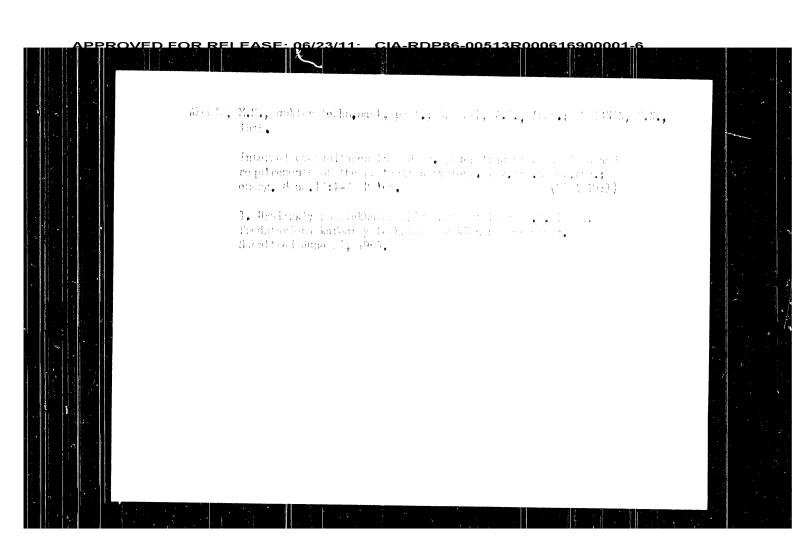
TITLE: Switching surges on 500-kv lines and required protection against them

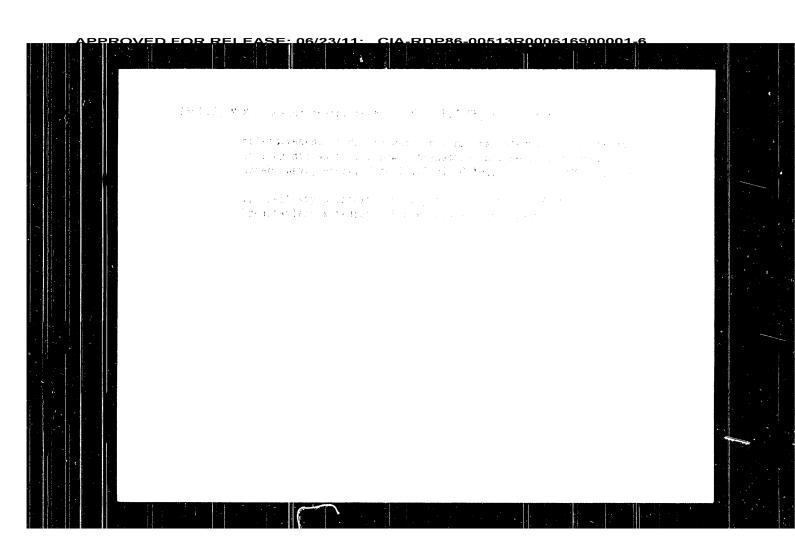
SOURCE: IVUZ. Energetika, no. 12, 1965, 1-7

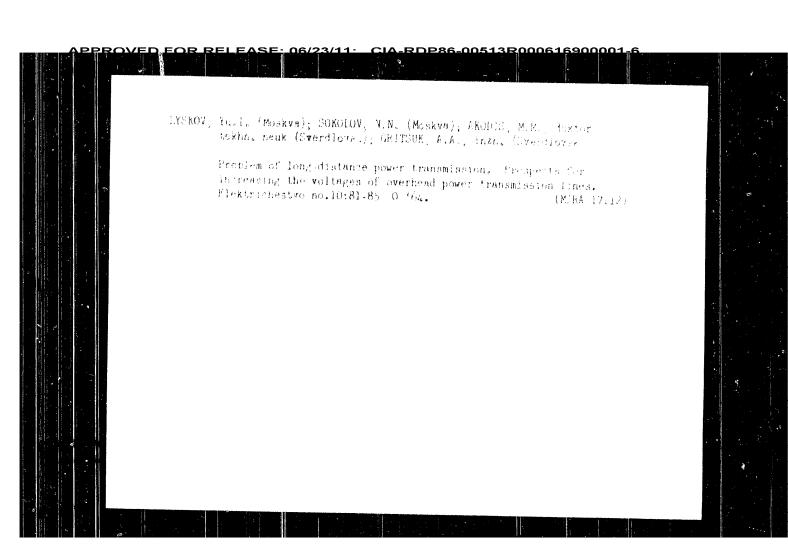
TOPIC TAGS: electric power transmission, overvoltage, switching surge

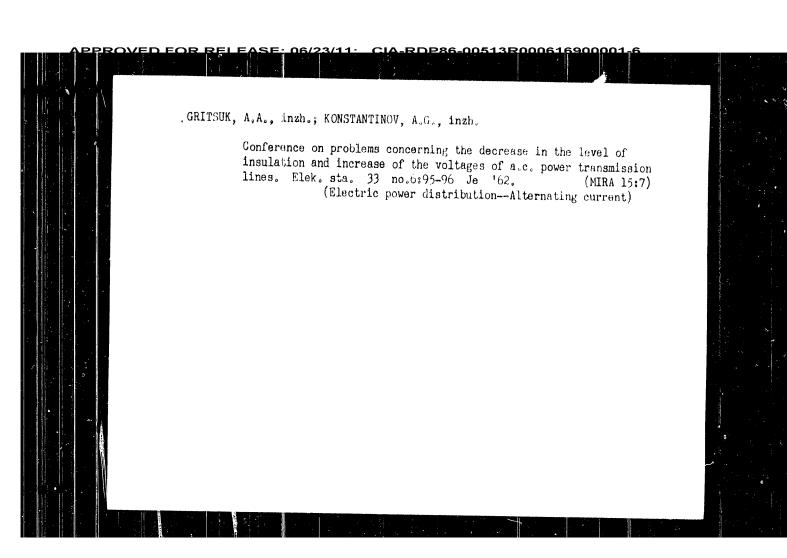
ABSTRACT: Various ideas and considerations re switching surges and protection against them are set forth; the probabilities of surges are taken into account. Insulator strings are tested by 1-4 msec rise-time impulses in the SSSR and by 250-300 m sec impulses in the US (E. H. Gehrig et al., IEEE Trans., PAS, no. 1, 1964, 41-48). The number of tests is sufficient for calculating the standard probability distribution in the SSSR. The insulation level of a transmission line should be set: (a) on the basis of the switching-surge dry flashover voltage for

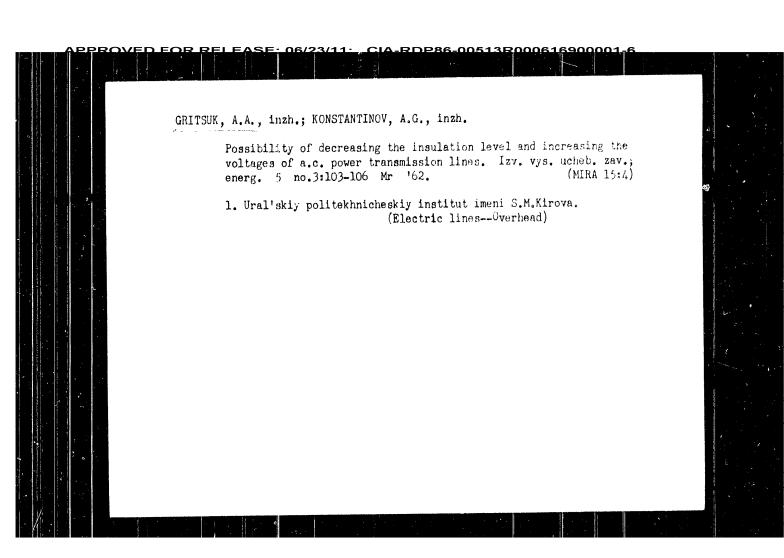
Card 1/2 UDC: 621.316.91.027.85

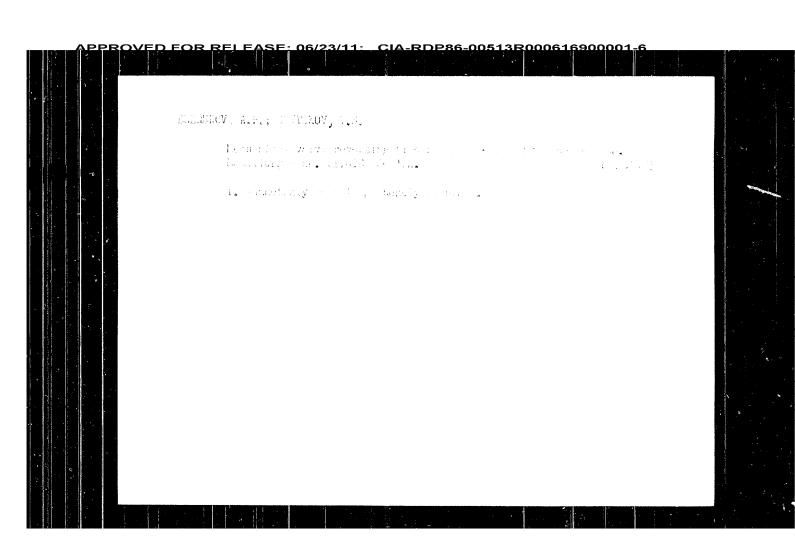












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L 10831-67

ACC NR: AR6034647 (A) SOURCE CODE: UR/0299/66/000/008/M017/M017

AUTHOR: Gritsman, Yu. Ya.; Lipovitskiy, G. S.; Gol'dina, B. G.; Orlova, R. B.

TITLE: Experimental data on extremity grafting after preservation for 48 hr

SOURCE: Ref. zh. Biologiya, Part II. dos. 6M99

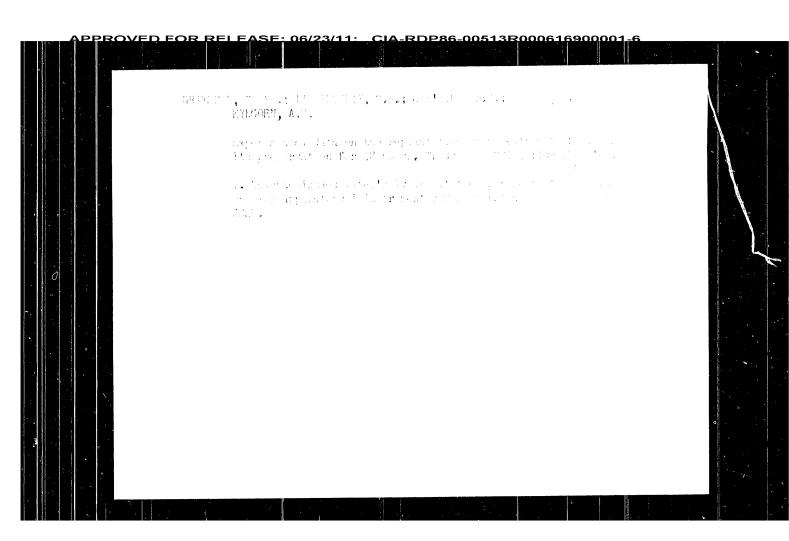
REF SOURCE: Tc. i-go Mosk, mon. in-ta, v. 42, 1965, 169-173

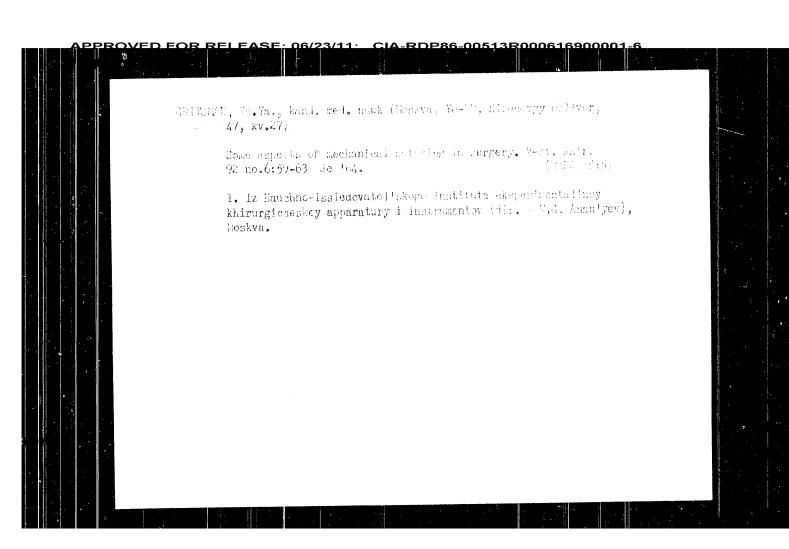
TOPIC TACK: How, the regre (ransplant, grafting, extremity, extremity grading, amputation

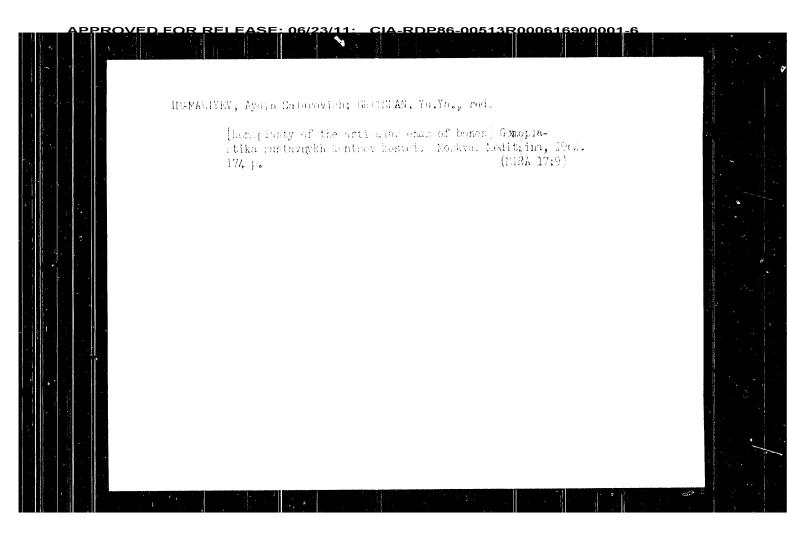
ABSTRACT: The action of a extremities of I dogs were preserved at +2 and ++2 for 48 hr. The dogs were preserved at +2 and ++2 for 48 hr. The dogs were the operation. The cost were independent of the cost were independent of the cost were more difficult and costrophycal changes were more severe than a dogs with extremities preserved for 24 hr after the amputation. Translation of abstract

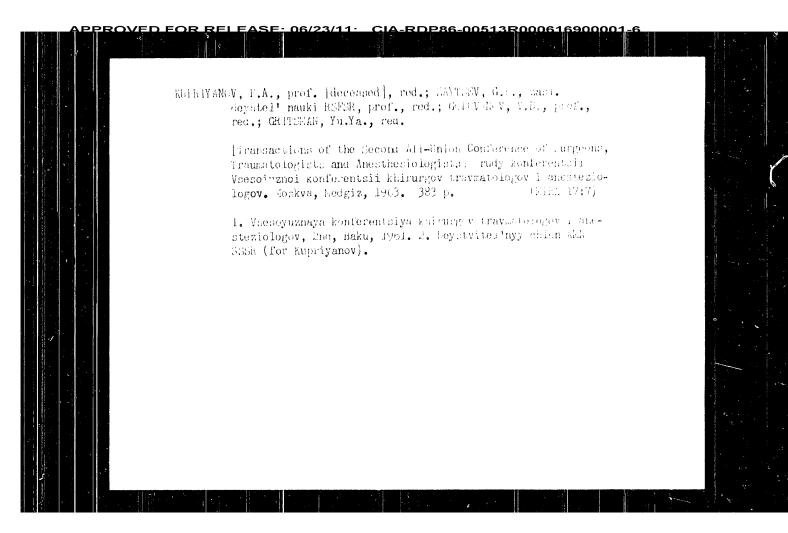
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L 19790-65 ACCESSION NR: AR4045764

apparently irreversible (in the main parts of the convoluted tubules) appeared in the kidney structure. In the third series autotransplantation of kidneys, preserved at low positive temperatures, was performed on 16 dogs. The transplanted kidney functioned for a short period in 7 dogs, for 4 days in 1 dog, and in 1 dog urine was excreted for 39 days and then, with removal of the intact kidney, the animal died. In all cases histological investigation disclosed the presence of changes in all parts of the nephron. The glomeruli and stroma of the kidney were damaged considerably less and sometimes not at all. Thus, the advisability of preserving kidneys under temperature conditions of +1 to 40°C is dubious, because changes develop in the kidney destroying its function.

SUB CODE: LS

ENCL: 00

Card 2/2

L 19790-65 AFWI/AHD ACCESSION NR: AR4045764 s/0299/64/000/013/M016/M016 SOURCE: Ref. zh. Biologiya. Svodnywy tom, Abs. 13Ml01 AUTHOR: Gritsman, Yu. Ya.; Gol'dina, B. G.; Gureyeva, Kh. F.; Eyngorn, A. TITLE: Investigation of possible long-term kidney preservation (at positive temperatures) CITED SOURCE: Sb. 3 Vses. konferentsiya po peresadke tkaney i organov, 1963. Yerevan, 1963, 123-124 TOPIC TAGS: kidney, dog, preservation, autotransplantation, transplantation, temperature

Autotransplantation of nonpreserved kidneys was

performed on the nack of one group of dogs. The kidney functioned in 5 of 9 experiments. With autotransplantation, dystrophic changes appeared in the kidney which did not deprive the organ of its functional capacity. In the second series of experiments kidneys were preserved at +2, +4°C. Dystrophic epithelium changes which were

Card 1/2

TRANSLATION:

